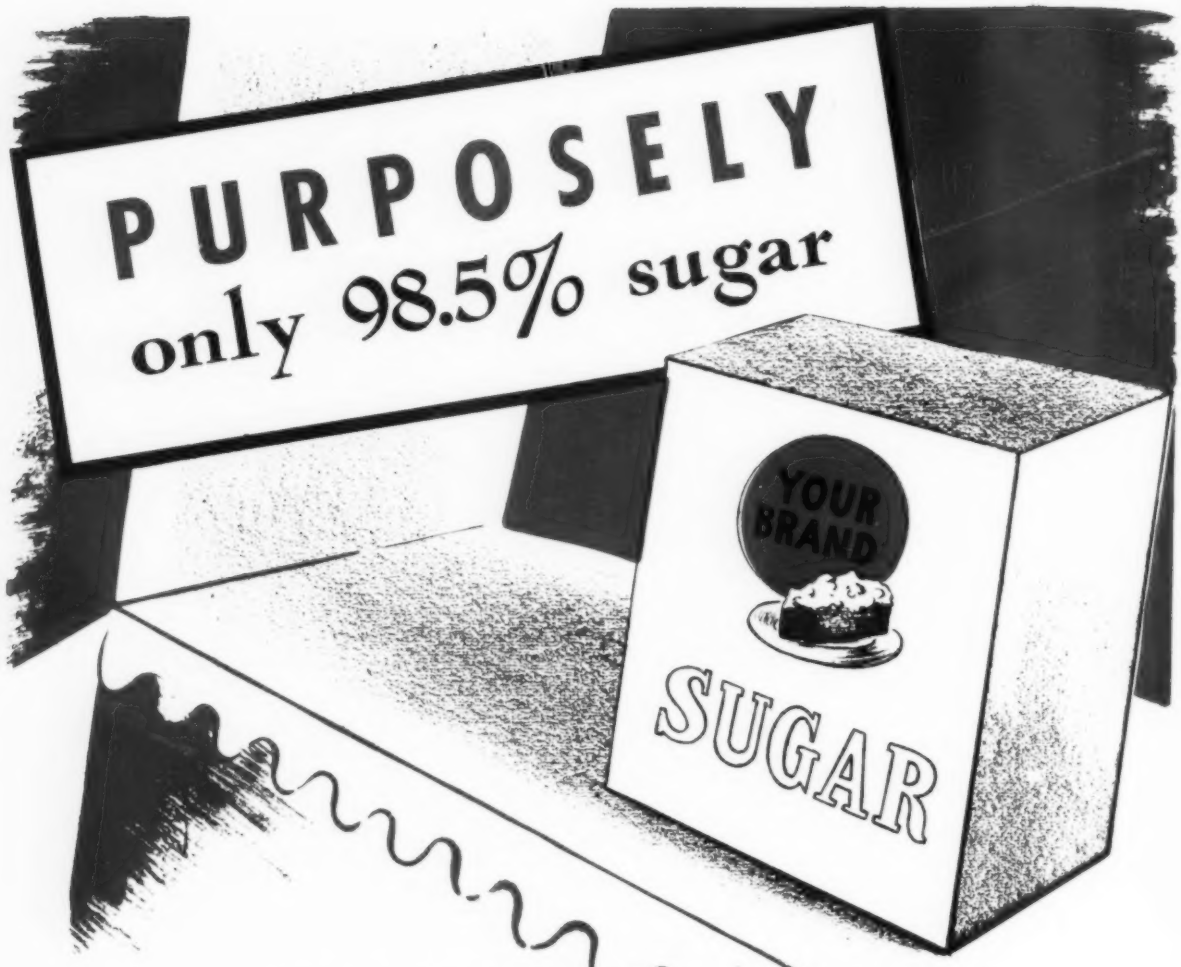
Drug & Cosmetic INDUSTRY

December 1947



. . . and the other 1.5% is SNOW TOP USP Precipitated Calcium Carbonate used as an anti-caking agent.

Confectionery sugar, normally a fine crystalline powder, loses its free-flowing quality in very humid weather and often becomes solidly caked even after the humidity becomes normal. Many manufacturers of powdered sugars now use SNOW TOP USP to coat the sugar crystals to keep them dry. Its moisture absorbent properties, non-soluble character, and extremely small particle size in the lighter grades make SNOW TOP USP a most economical and effective anti-caking agent for food product.

SNOW TOP

Snow Top Precipitated Calcium Carbonate • Tallex Abietic Acid • Nuchar Activated Carbons • Liquid Caustic Soda • Chlorine • Indulin (Lignin) • Liqro Crude Tall Oil • Indusoil Distilled Tall Oil • Tallene Tall Oil Pitch • Sulphate Wood Turpentine

industrial
CHEMICAL SALES
division west virginia pulp and paper company

230 PARK AVENUE
NEW YORK 17, N. Y.

35 E. WACKER DRIVE
CHICAGO 1, ILLINOIS

748 PUBLIC LEDGER BLDG
PHILADELPHIA 6, PA.

844 LEADER BLDG
CLEVELAND 14, OHIO

JAN 9 1948
UNIVERSITY OF SOUTH CAROLINA

PEOPLE PREFER THE *EFFICIENCY* OF NEW ENGLAND TUBES!

New England
SHEFFIELD PROCESS
TUBES

YOU'VE undoubtedly noticed more and more different *types* of products going to market in Collapsible Tubes. Consumers like their light weight, compact efficiency, ease of packing in medicine chest or travelling bag without danger of breakage or leaking. Manufacturers like their strength, which ends shipping losses due to breakage. When YOU buy Collapsible Tubes, be sure to "specify New England" *Sheffield Process* Tubes . . they're tougher, better looking, uniform, the *tops* in efficient packaging. Call or write our nearest field man, NOW.

If your tube filling facilities are inadequate, ship us your bulk product. We'll package it for you in tubes, jars or tins, ready for distribution. This is only ONE of the EXTRA services available at NEW ENGLAND!

NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 S. CANAL ST., CHICAGO 16 • NEW LONDON, CONN. • W. K. SHEFFIELD, V. P., 500 FIFTH AVE., NEW YORK 18
T. C. SHEFFIELD, 7024 MELROSE AVE., LOS ANGELES 38 • C. W. MILLER, 151 COLE ST., SAN FRANCISCO 17
EXPORT DEPT: 500 FIFTH AVE., NEW YORK 18, CABLE "DENTIFRICE", NEW YORK

Drug & Cosmetic INDUSTRY

DECEMBER 1947

CONTENTS

KEEPING POSTED	745
THE WIDENING PHARMACEUTICAL MARKET	750
MERGING INDUSTRY INTERESTS	753
PHYSIOLOGICAL AND CHEMICAL ASPECTS IN THE FLAVORING OF MEDICINAL PREPARATIONS	755
REXALL REPACKAGING	758
ALGINATES IN DRUGS AND COSMETICS	760
QUALIFICATIONS FOR A GOOD COSMETIC CHEMIST	763
SEASONAL VARIATION AS A FACTOR IN TOXICITY	764
PACKAGING AND SELLING	767
NEWS	787
PRODUCTION FORUM	799
YOUR TRADE-MARK RECORD	812
PATENT TRENDS AND THOUGHTS	815
COMPOUNDER'S CORNER	820
ADVANCING THERAPY	823
PERFUMER'S SHELF	828
ABREAST OF THE MARKETS	831
READERS' QUESTIONS	839
INDUSTRY'S BOOKS	841

The Drug and Cosmetic Industry is published monthly by Drug Markets, Inc., Frazer V. Sinclair, President and Treasurer; Thomas R. Farrell, Vice-president and Secretary. Publication Address, 28 Renne Ave., Pittsfield, Mass., U. S. A. Editorial and General Office, 101 West 31st St., New York 1, N. Y., U. S. A.

Business Manager, Frazer V. Sinclair; Advertising Representatives, P. W. Alexander, Walter M. Brauneiss, C. R. Keeley, Dwight H. Early, 100 No. LaSalle St., Chicago 2; Production Manager, Katherine Hyde; Circulation Manager, Harry G. Kelbly.

Subscription price—$3.00 a year, in advance, Foreign Countries, $5.00. Single copies, 35c; Back issues 50c. Entered as Second Class Matter, January 1, 1928, at the Post Office at Pittsfield, Mass., under the Act of March 3, 1879.

Member of Audit Bureau of Circulations.

Contents Copyrighted 1947 by Drug Markets, Inc.

Printed by Sun Printing Corp., Pittsfield, Mass., U. S. A.

THOMAS R. FARRELL, Editor

ELMER SHEETS, Managing Editor

FRANCIS CHILSON, Production Consultant

M. A. LESSER, Technical Editor

HARRY G. KELBLY, Raw Material Editor

HILDA C. McCOLLOM, Art Director

Laboratory tested WHITE OILS

U. S. P. OILS

Standard's U. S. P. White Oils are absolutely pure and unvarying in quality.
They meet or exceed the requirements of U. S. Pharmacopoeia XII—Stanolind Liquid Paraffin Heavy, Merusol White Mineral Oil, Superla White Mineral Oils—Saybolt Universal Viscosities ranging from 85 to 345 seconds at 100° F.

TECHNICAL OILS

Superla White Rose Oil
Extra White Rose Oil
Premier White Oil
Eureka White Oil
White Rose Oil
Acme White Oil
Saybolt Universal Viscosities ranging from 50 to 100 seconds at 100° F.

PETROLATUMS

Stanolene (the premium white petrolatum)
Stanolind Petrolatum Snow White
Stanolind Petrolatum Lily White
Stanolind Petrolatum Cream White
Stanolind Petrolatum Golden Topaz
Stanolind Petrolatum Topaz
Stanolind Petrolatum Amber
Stanolind Petrolatum Red Veterinary
Stanolind Petrolatum Dark

Also deodorized base oils for insecticide manufacture

STANDARD OIL COMPANY
(INDIANA)
910 South Michigan Avenue, Chicago 80, Illinois

STANDARD SERVICE

TONKA-MEL

for body and sweetness

This specialty approximates the persistent odor of the Tonka Bean and is outstanding in its fixative qualities and stability.

Write us on your firm's letterhead for further information and samples.

Schimmel & Co., Inc.
601 West 26th Street
New York 1, New York

schimmel

EXALTOLIDE

Lactone of 14, HYDROXYTETRADECANE, 1, CARBOXYLIC ACID

Vibrant as a sunburst—EXALTOLIDE is more than a fixative. In effect it lends a catalytic action which amplifies and diffuses the odor complex of your composition. ✲ ✲ ✲ Even minute quantities of EXALTOLIDE bring about these effects. EXALTOLIDE completes the perfect composition. It fixes, it rounds, it exalts.

CHUIT, NAEF & CIE.

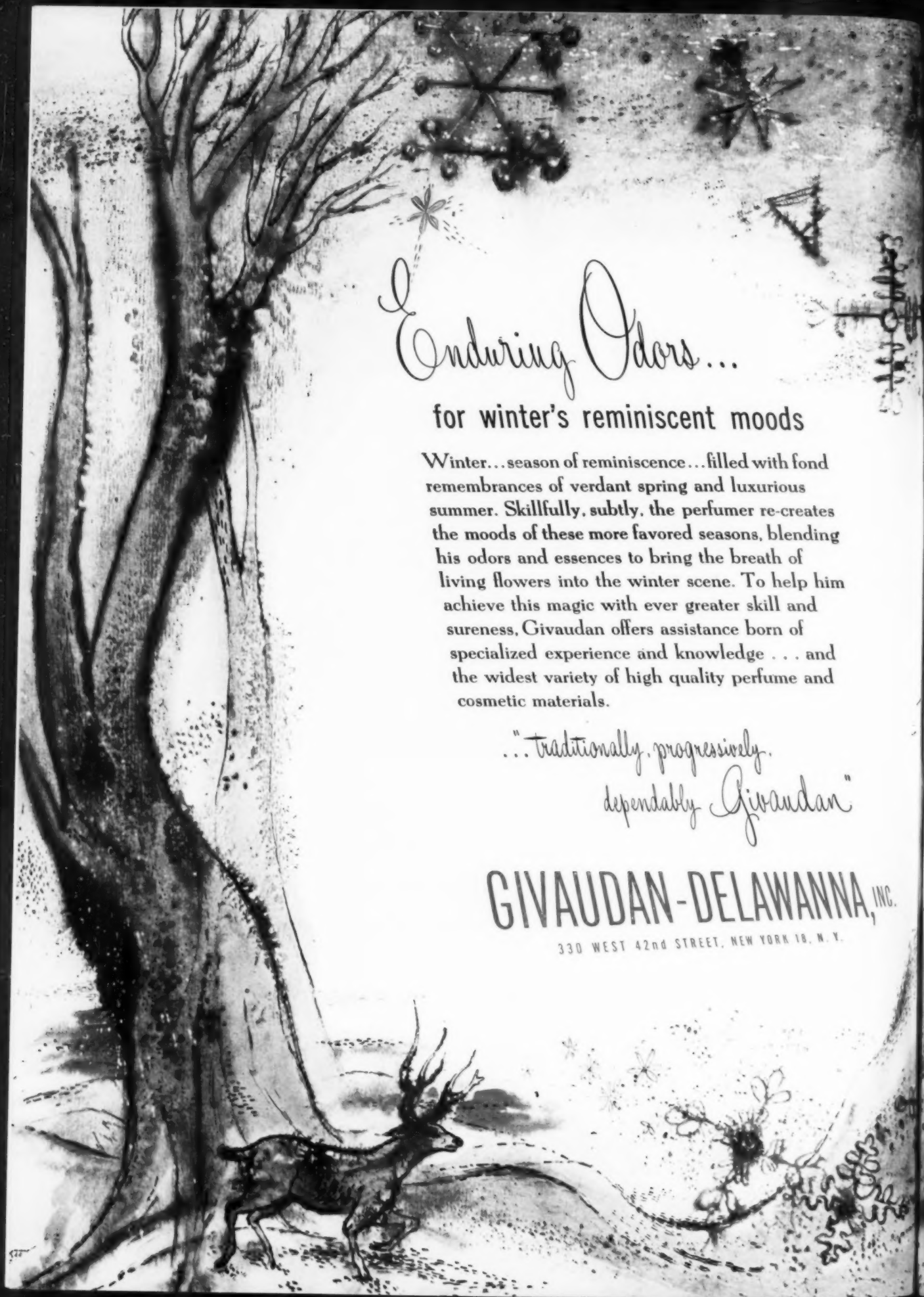
Firmenich & Co.

SUCCESSORS

250 WEST 18 STREET, NEW YORK 11, N. Y.

CHICAGO OFFICE: 612 NORTH MICHIGAN AVENUE; IN CANADA: CARAMEED, LTD., 350 WALLACE AVENUE, TORONTO

GENEVA, SWITZERLAND . . . PARIS, FRANCE



Enduring Odors...

for winter's reminiscent moods

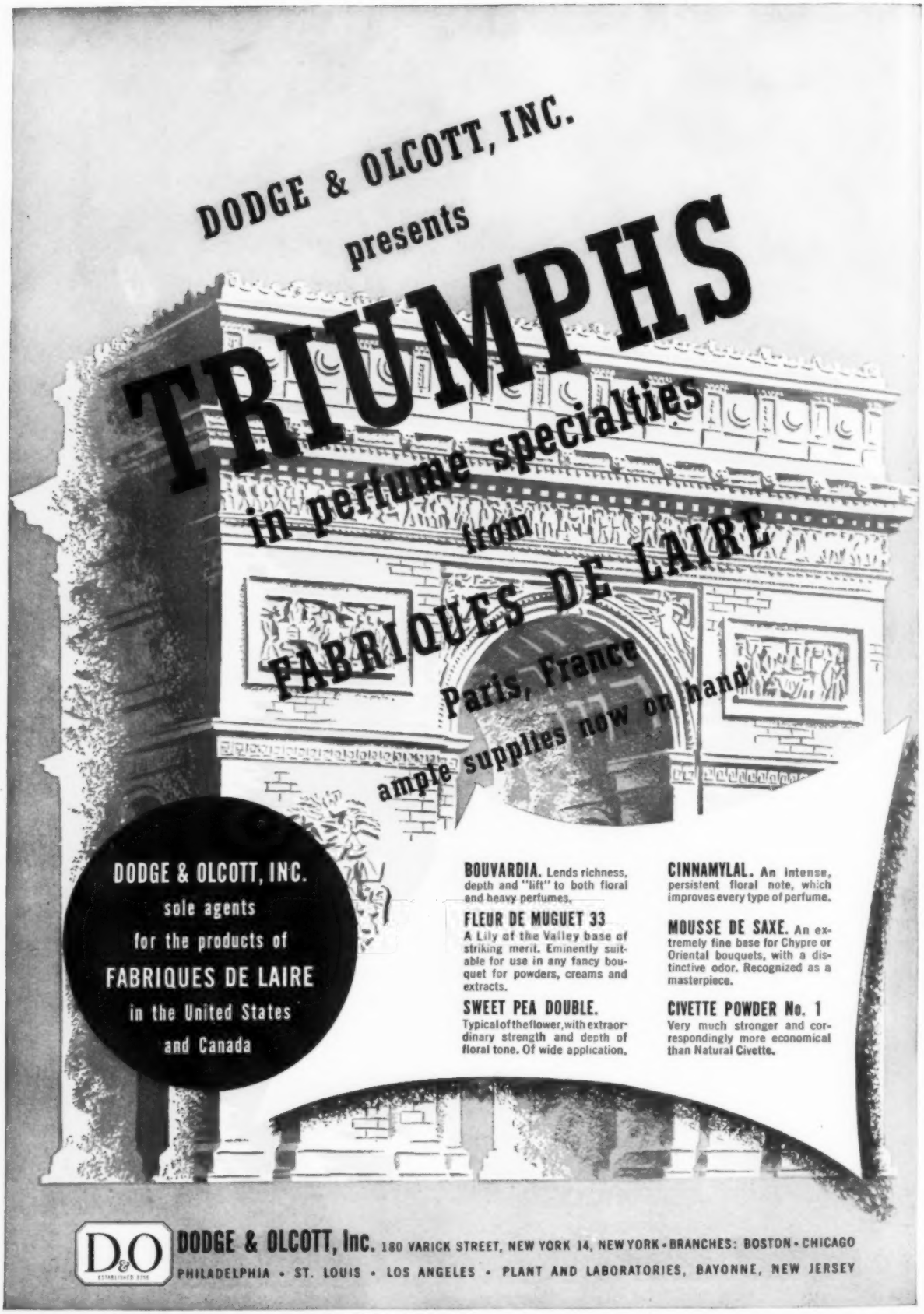
Winter... season of reminiscence... filled with fond remembrances of verdant spring and luxurious summer. Skillfully, subtly, the perfumer re-creates the moods of these more favored seasons, blending his odors and essences to bring the breath of living flowers into the winter scene. To help him achieve this magic with ever greater skill and sureness, Givaudan offers assistance born of specialized experience and knowledge . . . and the widest variety of high quality perfume and cosmetic materials.

"... traditionally, progressively, dependably Givaudan"

GIVAUDAN-DELAWANNA, INC.

330 WEST 42nd STREET, NEW YORK 18, N. Y.

Winter . . . Number 4 in a series of interpretations of the moods of the four seasons.


DODGE & OLCOTT, INC.
presents
TRIUMPHS
in perfume specialties
from
FABRIQUES DE LAIRE
Paris, France
ample supplies now on hand
DODGE & OLCOTT, INC.
sole agents
for the products of
FABRIQUES DE LAIRE
in the United States
and Canada
BOUVARDIA. Lends richness, depth and "lift" to both floral and heavy perfumes.
FLEUR DE MUGUET 33
A Lily of the Valley base of striking merit. Eminently suitable for use in any fancy bouquet for powders, creams and extracts.
SWEET PEA DOUBLE.
Typical of the flower, with extraordinary strength and depth of floral tone. Of wide application.
CINNAMYLAL. An intense, persistent floral note, which improves every type of perfume.
MOUSSE DE SAXE. An extremely fine base for Chypre or Oriental bouquets, with a distinctive odor. Recognized as a masterpiece.
CIVETTE POWDER No. 1
Very much stronger and correspondingly more economical than Natural Civette.
D&O
DODGE & OLCOTT, Inc. 180 VARICK STREET, NEW YORK 14, NEW YORK • BRANCHES: BOSTON • CHICAGO
PHILADELPHIA • ST. LOUIS • LOS ANGELES • PLANT AND LABORATORIES, BAYONNE, NEW JERSEY

COSMETIC RAW MATERIAL
WATER SOLUBLE GUMS
FOOD COLORS

PERFUME BASES
ESSENTIAL OILS
FRUIT FLAVORS

QUINCE SEED
OLEO RESINS
STEARIC ACID

WAXES
THYMOL
AROMATICS

ORBIS
PRODUCTS
CORPORATION
215 PEARL STREET, NEW YORK
FACTORY AND LABORATORY: NEWARK, N. J.

CHICAGO PHILADELPHIA MEXICO, D.F. BOSTON LOS ANGELES MEMPHIS, TENN.

Cosmetics Stay Fresh Longer

on Dealer's Shelf and Milady's Vanity

With SORBITOL

For superior conditioning results—compare SORBO and ARLEX grades of sorbitol

For years, sorbitol has been recognized as the outstanding humectant-emollient for high quality cosmetics and pharmaceuticals. It gives you more complete control over moisture content of creams and lotions, protecting the original freshness of your product through shelf-life and vanity-table life until milady is ready to buy again.

Now, through new manufacturing technique, Atlas is able to offer formulators two grades of sorbitol—

SORBO*—Clear, water-white, aqueous solution (70%) of D-sorbitol. Clean, sweet taste. No odor. The purest sorbitol solution in a decade of Atlas manufacturing experience.

ARLEX*—Atlas commercial sorbitol solution, containing closely related polyhydric materials which make it non-crystallizing. A staple of the cosmetic and pharmaceutical industry for over seven years.

You'll want to compare these sorbitol grades for yourself in your own formulations. Each has special advantages which may be of greatest importance to you.

Write for samples and literature. Our technical staff will gladly work with you on application of sorbitol to your formulas.

Other Atlas Products for Fine Cosmetics and Pharmaceuticals

ARLACELS*—A series of non-ionic emulsifiers developed especially for cosmetics and pharmaceuticals. Virtually free of color and odor. Generally dispersible in water, soluble in most organic solvents.

TWEENS*—A series of non-ionic emulsifiers, widely used in cosmetics and pharmaceuticals. They tend to be water-soluble and have a wide range of organic solubilities.

WATER-SOLUBLE LANOLIN DERIVATIVES—For creams, lotions, wave-sets, shampoos or hairdressings. Four products ranging from water-dispersible to completely water-soluble. Non-ionic. Compatible with usual cosmetic chemicals. May be used as additives or emulsifiers.

Samples are yours for the asking. Write us.

CHEMICALS ATLAS EXPLOSIVES

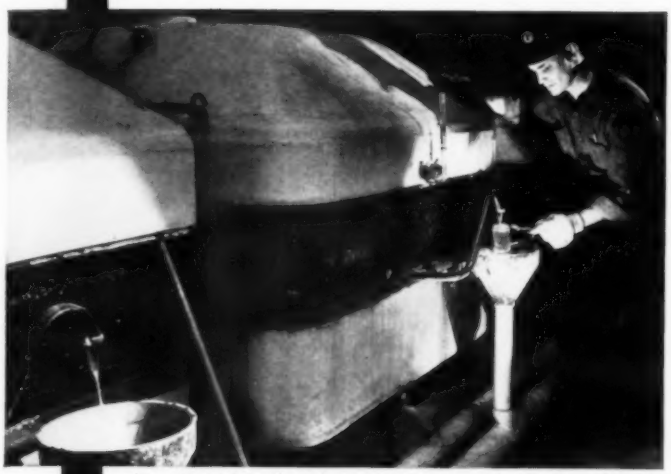
ATLAS

INDUSTRIAL CHEMICALS DEPARTMENT

* SORBO, ARLEX, ARLACEL, TWEEN—Reg. U. S. Pat. Off.

ATLAS POWDER COMPANY, WILMINGTON 99, DELAWARE • OFFICES IN PRINCIPAL CITIES • CABLE ADDRESS • ATPOWCO

Three Hooker Chemicals That Help Make Thousands



Samples of Caustic Soda, as it comes from the Hooker "S" Cell, are checked carefully in the laboratory for strength and purity.

✓ LIQUID CHLORINE
✓ CAUSTIC SODA
✓ MURIATIC ACID

Hooker chemicals numbering over a hundred, and thousands of other products get their start from Caustic Soda, Liquid Chlorine and Muriatic Acid made by Hooker. Your supplies of these basic heavy chemicals are made possible to a large extent by the Hooker Type "S" electrolytic cell, designed and developed by our own engineers.

Caustic Soda, Liquid Chlorine and Muriatic Acid are produced and shipped from our plants at Niagara Falls, New York, and Tacoma, Washington. Helpful technical service and prompt shipping are corollary to the uniform high quality of these Hooker products.

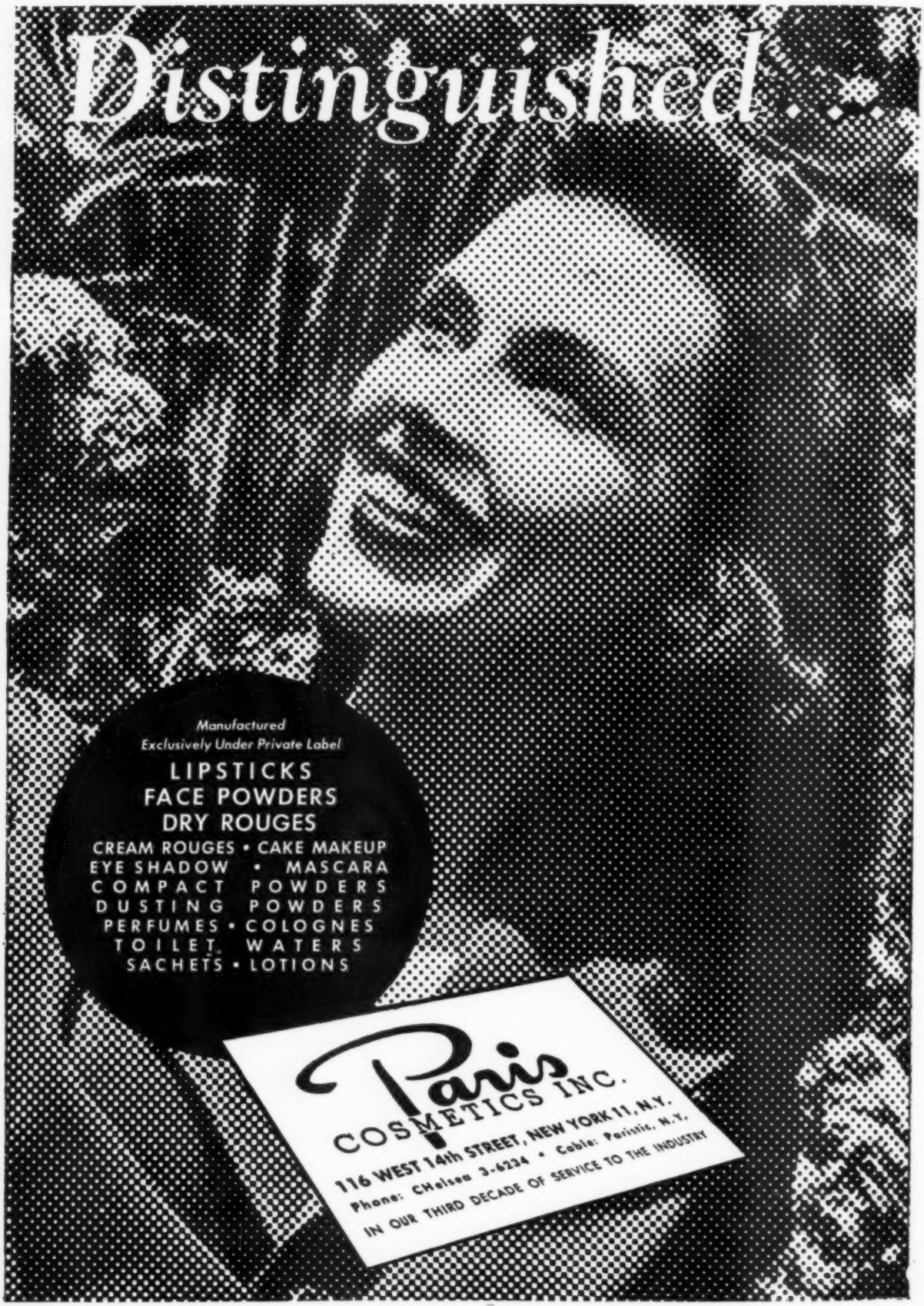
Data sheets and other literature describing Hooker Chemicals are available upon request. If you don't have our latest General Products List, Bulletin 100, why not write today for your copy?

HOOKER ELECTROCHEMICAL COMPANY

13 Forty-Seventh St., Niagara Falls, N. Y.
New York, N. Y. Wilmington, Calif. Tacoma, Wash.

HOOKER CHEMICALS

Aluminum Chloride Paradichlorbenzene Monochlorbenzene Sodium Benzoate Sulfur Chlorides Sodium Sulfide Sodium Sulfhydrate


Distinguished . . .
Manufactured
Exclusively Under Private Label
LIPSTICKS
FACE POWDERS
DRY ROUGES
CREAM ROUGES • CAKE MAKEUP
EYE SHADOW • MASCARA
COMPACT POWDERS
DUSTING POWDERS
PERFUMES • COLOGNES
TOILET WATERS
SACHETS • LOTIONS
Paris
COSMETICS INC.
116 WEST 14th STREET, NEW YORK 11, N.Y.
Phone: CHelsea 3-6234 • Cable: Parisitic, N.Y.
IN OUR THIRD DECADE OF SERVICE TO THE INDUSTRY

May the good smells that mean Christmas surround you

WE hope your whole holiday season is filled with the good smells of happiness . . . Let there be sweet wood smoke for you, from fireplaces with youngsters around them . . . and the spicy smell of busy kitchens, where pies and fat turkeys roast . . . May your house be filled with popcorn smells, apples, oranges, nuts—with the perfumes of loved ones near you making your heart feel glad.

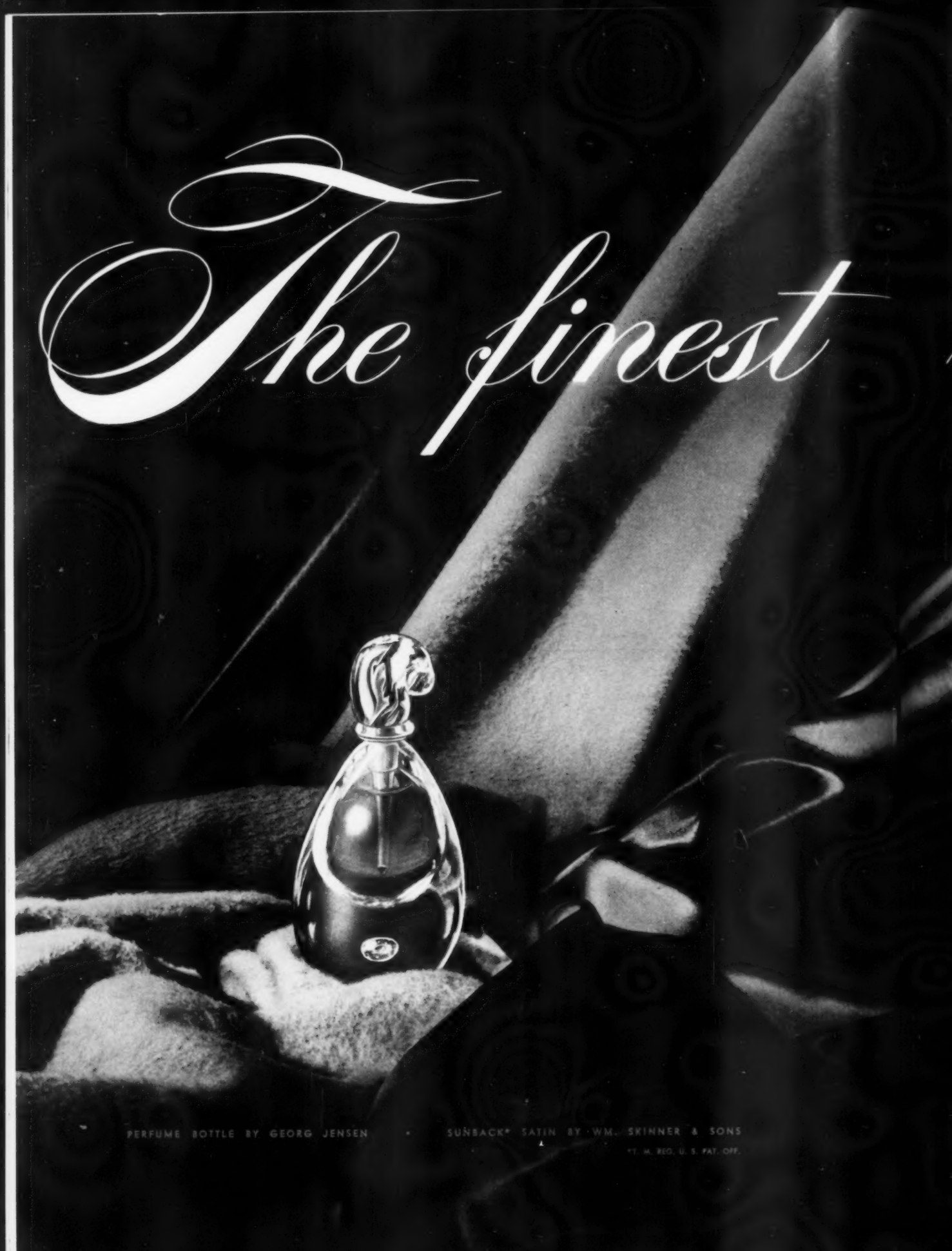
You have helped make our holidays happy. Thank you for all your friendship.

Merry Christmas! A Good New Year!

Norda *Essential Oil and Chemical Company, Inc.*

601 West 26th Street, New York 1, N. Y.

CHICAGO • LOS ANGELES • ST. PAUL • MONTREAL • TORONTO • HAVANA • MEXICO CITY • LONDON


The finest
PERFUME BOTTLE BY GEORG JENSEN
SUNBACK* SATIN BY WM. SKINNER & SONS
*T. M. REG. U. S. PAT. OFF.

t materials . .
TO ACHIEVE THE FINEST IN PERFUME
START WITH THE FINEST MATERIALS
VAN AMERINGEN-HAEBLER, INC.
MANUFACTURERS AND CREATORS OF THE FINEST PERFUME PRODUCTS
315 FOURTH AVENUE, NEW YORK 10, NEW YORK

ELASTICOTE #183

The key to the longest wearing manicure ever known to the consumer.

Truly something new and different.

Write to *Durlin* for samples and information about this new synthetic product.

Another reason why *Durlin* is:

THE FOREMOST NAME IN BULK NAIL ENAMEL

DURLIN CO.
744 Broad Street
Newark 2, N. J.

Cable Address: Durlin Newark Newjersey

High-quality ZINC STEARATE U.S.P. MERCK again is available for incorporation into first-grade powders. Manufactured from best quality *Triple-Pressed Stearic Acid,* ZINC STEARATE U.S.P. MERCK is an exceptionally smooth, free-flowing, white powder, with excellent adhering properties and fine "slip." It also is free from gritty or harsh particles, and from foreign or rancid odor. It complies with the specifications of *The U. S. Pharmacopœia.* Added to other ingredients in correct proportions, Zinc Stearate U. S. P. Merck will give your powder effective covering properties, perfect adherence, fineness of texture, and the bulkiness desired.

Also Available for Use in Better-Grade Face Powders

ZINC STEARATE U.S.P. SPECIAL A-1214

This premium Zinc Stearate is made from a special high-quality Stearic Acid. Marketed only in 50-lb. corrugated containers.

Quotations and samples furnished to manufacturers on request.

ZINC STEARATE U.S.P. MERCK

MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

New York, N. Y. • Philadelphia, Pa. • St. Louis, Mo. • Elkton, Va. • Chicago, Ill.
Los Angeles, Calif. • *In Canada:* MERCK & CO., Ltd. Montreal • Toronto • Valleyfield

MERCK MERCK

CODAN

Christmas Greetings

and

Best Wishes for the New Year

★★★★★★★★★★★★

GERARD J. DANCO, INC.

3 EAST 44th STREET • NEW YORK 17, N. Y.

Exclusive Agents in the United States, Canada and Mexico for:

CAMILLI, ALBERT & LALOUE, S. A.

Grasse - France

AND

ETABLISSEMENTS VICTOR HASSLAUER

Paris - France

"Quality Merchandise Guaranteed by Reputation"

NEW YORK • CHICAGO • MONTREAL • PARIS

PASADENA, CALIF.

MONTREAL, CANADA

SUFFERN, N. Y.

objectives and perspectives

While we have been manufacturing Private Brand Cosmetics longer than most Companies, our contention is that it is not the age of a company, but the seasoned experience of its members that endows it with dependability.

Here, at Allied, you will encounter a compact organization of specialist-principals with a wealth of experience, geared to cog with the most modern scientific operations in the toiletries field. Yet, withal, an organization composed of men without poses . . . And who like to cook up things that aren't in a book . . . a good test of skill and taste.

Always, we endeavor to incubate and inculcate merits that give a product EDGE . . . Sincerity and craftsmanship are the dual ideals which have foundationed our organization. When we assume the responsibility for manufacturing your product for distribution through broad trade channels . . . our reputation, too, is at stake.

Unlimited service to a limited number of clients has yielded excellent results. We have been most cautious in avoiding rapid expansion, knowing, full well, that mushrooming often produces toadstools.

These, in brief, are the objectives and perspectives to which we tenaciously adhere. And, we harbor the notion that your ship will come in provided you engage . . . the *right* skipper.

Avon Allied Products INC.

PRIVATE BRAND SPECIALISTS

30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

ROWAG

QUALITY LANOLIN for BETTER CREAMS and OINTMENTS

Put that "plus value" in your products by using ROWAG AA...the Lanolin that puts QUALITY into your creams and ointments.

ROWAG AA is free from impurities and has a consistently high cholesterol content (15% to 16%). It is an exceptionally effective skin softening agent and emolient and has clear color and clean odor. As a powerful emulsifier and emulsion stabilizer ROWAG AA is unsurpassed.

Write for full details and learn why ROWAG AA Lanolin is the preferred Lanolin of many of America's leading cosmetic manufacturers.

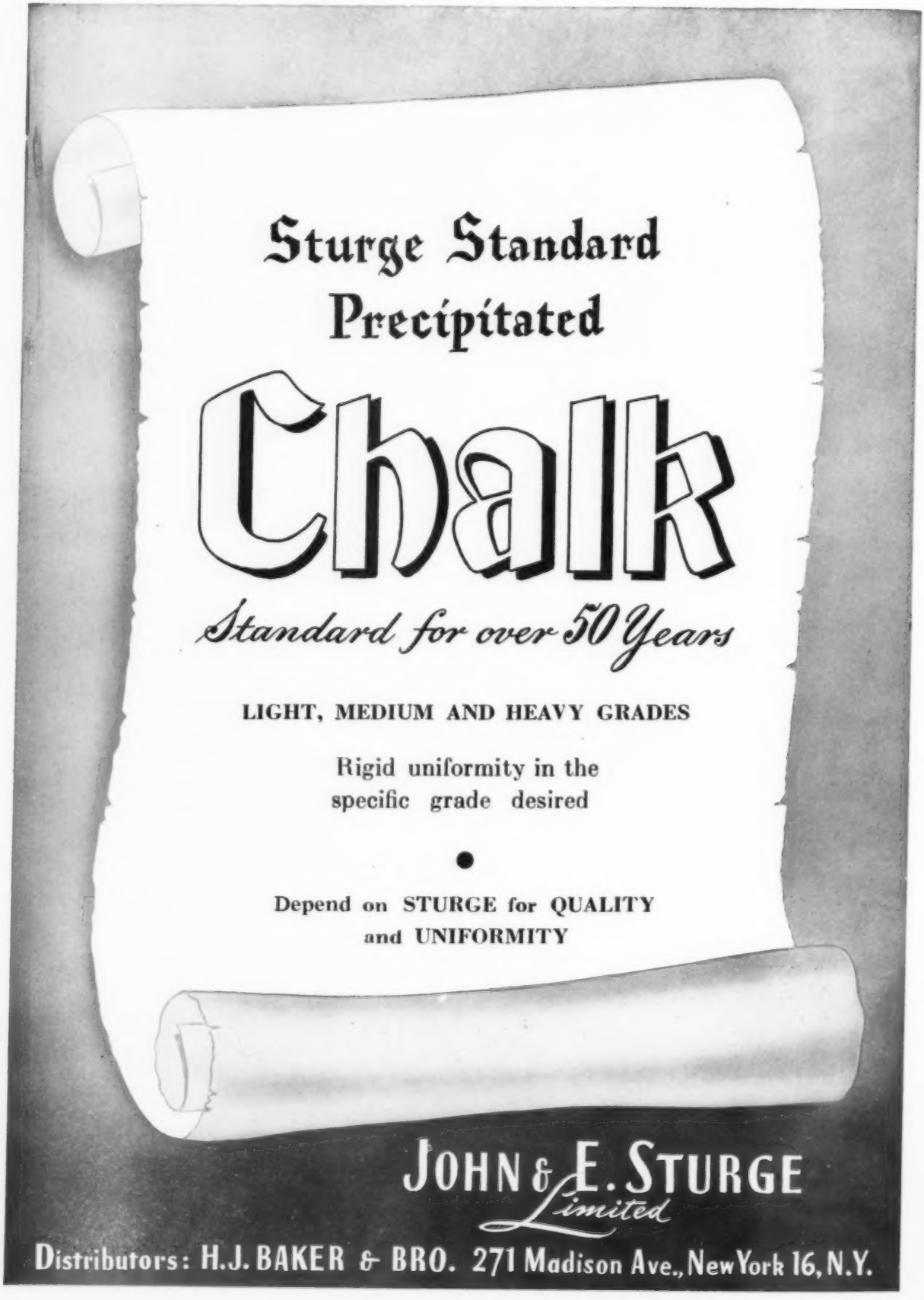
ROBINSON WAGNER CO., INC.

LANOLIN • LANOLIN ALCOHOLS • ALCOLAN • CETAL • BEESWAX

110 EAST 42nd STREET • NEW YORK 17, N. Y.

Cable Address: "ROWAG" • *Plant:* MAMARONECK, N. Y.

Christmas Greetings...
"Merry Christmas to you all," Du Pont carols happily,
(speaking in behalf of synthetics, and isolates like Rhodinol P)
May good fortune with you constantly abide,
(and may you always love our Cuminic Aldehyde)
We wish you new clothes, new house and slick new car,
(we also wish you'll keep in mind our Astrotone* BR)
May the laughter of little children fill your happy home,
(and may you remember the excellence of our Methyl Rhodione*)
We hope people buy your wares and think them increasingly great,
(and we thank you for your orders for our Terpinyl Propionate)
In other words — we wish you the joy this cheery season assures.
And a Happy New Year, too — from E. I. du Pont de Nemours!
* Trade-Mark
E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Aromatics Section, Wilmington 98, Delaware. Branch Offices: Atlanta, Boston, Charlotte, Chicago, New York, Philadelphia, Providence, San Francisco.
Du Pont Aromatics
BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY
DU PONT
REG. U.S. PAT. OFF.


Sturge Standard
Precipitated
Chalk
Standard for over 50 Years
LIGHT, MEDIUM AND HEAVY GRADES
Rigid uniformity in the
specific grade desired
Depend on STURGE for QUALITY
and UNIFORMITY
JOHN & E. STURGE
Limited
Distributors: H.J. BAKER & BRO. 271 Madison Ave., New York 16, N.Y.

Announcing
NEW
• COSMETIC
• ZINC
• STEARATE
WARCO CZ
Adhesiveness • Softness • Slip
Bloom • Fluffiness
Specify WARCO CZ to Insure Quality
WARWICK CHEMICAL COMPANY
DIVISION
580 FIFTH AVENUE • NEW YORK 19, N. Y.
Sun
CHEMICAL
CORPORATION

PENICK
FOR NATURAL AND SYNTHETIC ESTROGENS

In the production of natural and synthetic estrogens—as in many other basic materials—S. B. Penick & Company supplies pharmaceutical manufacturers with medicinals more than meeting all accepted quality standards . . . Manufactured under the direction of skilled chemists, these estrogens are constantly available.

GYNESTROL
(NATURAL *Estrogenic Substance*)

Derived exclusively from mares' pregnancy urine. Sold in bulk, with a firm guarantee of potency. Available in crystallizate powder form, in absolute alcohol and in vegetable oil solutions.

DIETHYLSTILBESTROL, U. S. P.
(Synonym: Stilbestrol)

The usefulness of this stilbene compound is widely known.

DIETHYLSTILBESTROL DIPROPIONATE

An ester of diethylstilbestrol, preferred by some practitioners.

HEXESTROL, N. N. R.

A therapeutic agent stated to possess some advantages over diethylstilbestrol.

S. B. PENICK & COMPANY

50 CHURCH STREET, NEW YORK 7, N. Y.
Telephone, COrtlandt 7-1970

S. B. PENICK & COMPANY • ASHEVILLE • NEW YORK • CHICAGO

735 WEST DIVISION STREET, CHICAGO 10, ILL.
Telephone, MOHawk 5651

We Count Our Blessings...

...and among them we find you—our friends.

Such deep and lasting friendships growing stronger through the years are an inspiration at Christmas.

In the year ahead, we will strive to foster them in the manner in which they were born...

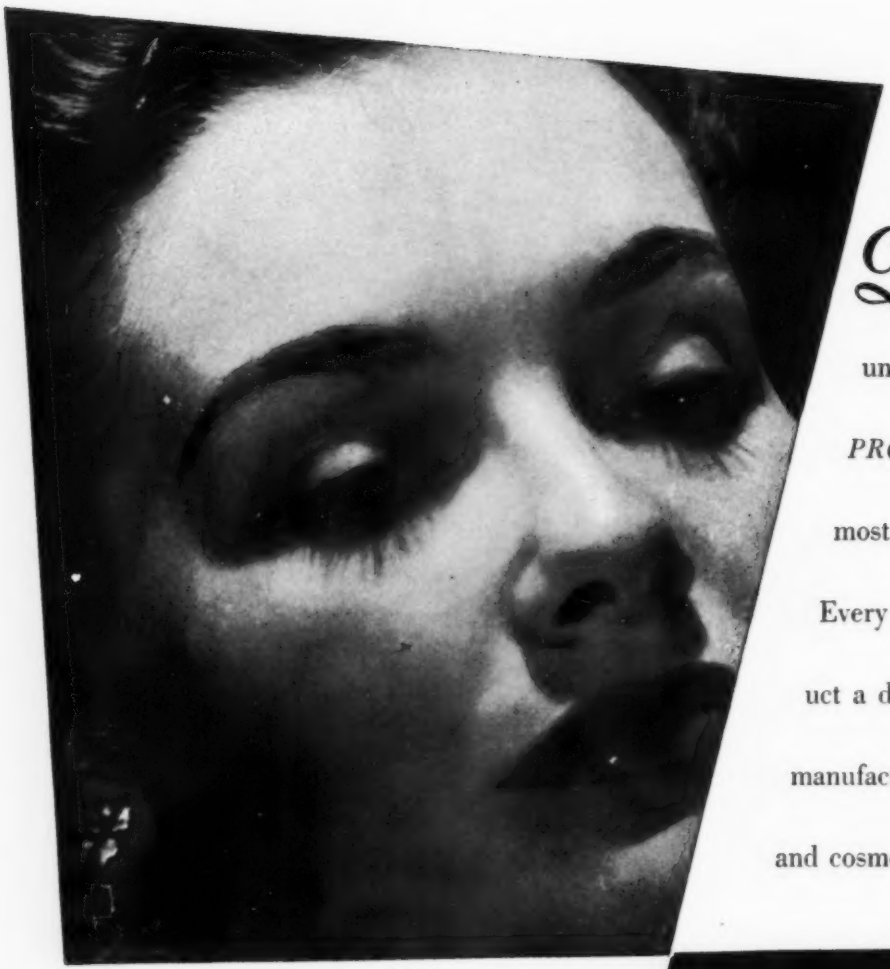
by producing a superior product

and justifying your faith in us.

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895 . . . ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK 13, N.Y. • 221 NORTH LASALLE STREET, CHICAGO 1, ILL.



QUALITY based on unceasing research . . . *PRODUCTION* under the most exacting control . . . Every *SYNTOMATIC* Product a distinctive asset in the manufacture of your perfumes and cosmetic preparations.

AROMATICS

ESSENTIAL OILS

PERFUMERS MATERIALS

SYNTOMATIC CORPORATION

114 EAST 32nd STREET • NEW YORK 16, N. Y. • MURRAY HILL 3-7618

THIS AERO BRAND STEARATES

STORY SPEAKS FOR ITSELF!

AERO* BRAND STEARATES . . . Calcium . . . Zinc . . . Aluminum . . . Magnesium . . . are products of the finest manufacturing facilities of their kind. The famous AERO BRAND seal on your stearate supplies means a fine, fluffy texture, uniformity and other recognized superior processing characteristics contributing basic advantages to the efficiency and economy of your operations. For product quality . . . for service . . . for the all-around dependability on which economical operations rely...it's CYANAMID AERO BRAND STEARATES.

CYANAMID'S MODERN FACILITIES BECOME YOUR DEPENDABLE SOURCE OF SUPPLY WHEN YOU SPECIFY...

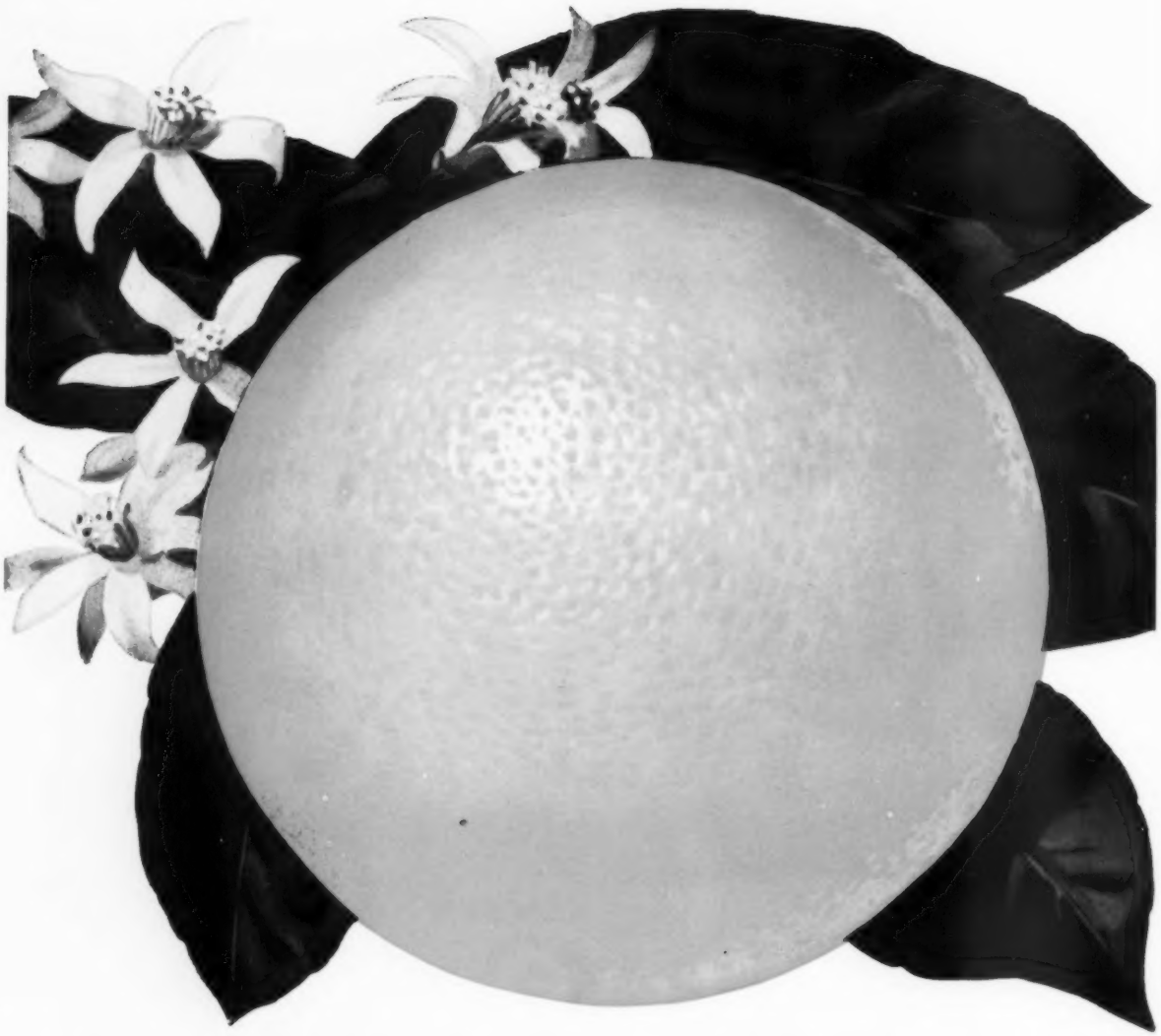
AERO BRAND STEARATES

Industrial Chemicals Division

AMERICAN CYANAMID COMPANY

30 ROCKEFELLER PLAZA · NEW YORK 20, N. Y.

*Trade Mark



THE WORLD'S FINEST ORANGE OIL

Made exclusively from oranges from the Sunkist Groves of California.

Exchange Oil of Orange gives you more *real orange flavor,* drop for drop or pound for pound, than any other orange oil.

Give it all your tests for *quality, uniformity* and *strength.* Then you'll buy Exchange Brand.

Distributed in the United States exclusively by

DODGE & OLCOTT, INC.

180 Varick Street, New York 14, N. Y.

FRITZSCHE BROTHERS, INC.

76 Ninth Avenue, New York 11, N. Y.

Distributors for:

CALIFORNIA FRUIT GROWERS EXCHANGE

PRODUCTS DEPARTMENT, ONTARIO, CALIF.

Producing Plant:

The Exchange Orange Products Co., Ontario, Calif.

Exchange

OIL OF

ORANGE

U. S. P.

VAN DYK EMULSIFIERS

GLYCOL AND GLYCEROL FATTY ACID MONO ESTERS

We have been manufacturing a full line of these esters for many years. They are made of the finest raw material and have a minimum free acid and alcohol content. They are available in both self-emulsifying and non-self-emulsifying grades.

SPECIAL ACID-STABILIZED EMULSIFIERS

for antiperspirant creams, permanent wave creams, and other cosmetic and allied products containing large percentages of electrolytes and acids.

NON-IONIC EMULSIFIERS

These emulsifiers have many specialized applications. They are particularly suitable for emulsions in which stability to acids, alkalis, and salts is of prime importance. Because of their non-ionic character, their compatibility with other components of emulsions is considerably higher than that of ordinary ionizable emulsifiers.

"CUSTOM-MADE" EMULSIFIERS

We have had a wide experience in formulating emulsifiers adjusted to meet special conditions, for which the emulsifiers available on the market have not been found suitable. A large part of our production consists of these "custom made" emulsifiers. We welcome an opportunity of conferring with manufacturers about emulsifiers to fit their special requirements, either in new products which they are planning to bring out or in existing products that they wish to modernize or improve.

Van Dyk emulsifiers are manufactured on a large scale in a modernly equipped plant. Rigid and exacting scientific control of each step in their production assures unvarying, dependable uniformity in the quality of our emulsifiers.

for PROTECTION against MOLDS and RANCIDITY

PRESERVATOL

A preservative for cosmetics containing water or other material favorable to the growth of micro-organisms. Protects against mold formation.

ANTRANOX M

An antioxidant-preservative for cosmetics containing vegetable or animal oils or fats. Protects against rancidity.

VAN DYK & COMPANY, INC.

Manufacturers of Perfumery and Cosmetic Raw Material since 1901

Belleville 9, New Jersey

Los Angeles 12: 1282 Sunset Boulevard

The President and Staff of
TOMBAREL PRODUCTS CORPORATION
extend hearty greetings and sincere wishes
that your Christmas may be Merry
and your New Year Happy and Prosperous

Season's Greetings

Tombarel PRODUCTS CORPORATION • *L. J. Zollinger*, President
12 East 22nd Street, New York 10

CHICAGO: A. C. DRURY & CO., Inc., 219 EAST NORTH WATER STREET

ZIMMERMAN LIPSTICKS PREFERRED IN UNBIASED CONSUMER TESTS!

We take pride in just one of the numerous letters which we have received regarding our lipsticks. This quotation comes from a very prominent national advertiser:

"*Incidentally, you may be interested to learn that in unbiased consumer tests of your lipsticks against others, yours was preferred as to texture, appearance and results achieved by use.*"

Using Zimmerman lipsticks or any other cosmetic product would bring the same kind of letters to you. We also manufacture creams, lotions, powders, rouge, cologne and perfumes.

W. F. ZIMMERMAN, INC.

404 Fourth Avenue
New York 16, N. Y.

2 Plants

605-635 So. 21st St.
Irvington, N. J.

• Manufacturers • Packagers •

QUALITY INTEGRITY SERVICE

Mexican Representative: Sixto Noreiga R., Apartado 697, Mexico, D. F.
Buenos Aires Representative: T. O. Mudd, Jr., North American Equipment S.R.L.
Av. Cordoba 2431, Buenos Aires, Argentina

1775

Even before Paul Revere made his famous ride from Boston to Lexington on April 18, 1775, chemicals were produced on the site of the present NYQ plant.

Methods have been improved since those early days. Equipment has been improved. New standards of quality and purity have been adopted.

All down the years, NYQ has kept abreast of these changes and improvements.

When you buy chemicals bearing the NYQ label, you can be sure of quality, purity, and uniformity.

MANUFACTURERS OF

Ammoniated Mercury
Bismuth Subcarbonate
Bismuth Subgallate
Bismuth Subnitrate
Bismuth Subsalicylate and other Bismuth Salts
Caffeine Citrated
Cinchonine Sulfate
Cinchonidine Sulfate
Iodine Resublimed
Iodoform
Potassium Iodide (Cryst.-Gran.-Powd.)
Quinidine Sulfate
Quinine Sulfate and other Quinine Salts
Strychnine Alkaloid
Strychnine Sulfate
Theobromine and Sodium Acetate
Theobromine and Sodium Salicylate
Totaquine
Thymol Iodide

GENERAL OFFICES
99-117 North Eleventh St.
Brooklyn 11, N. Y.

NYQ

ST. LOUIS DEPOT
915 Market Street
St. Louis 1, Mo.

Symbol of Quality

BE CONFIDENT OF HIGHEST QUALITY BY USING N.Y.Q. CHEMICALS

First Aid for Production Bottlenecks

- **ARE YOU SHORT OF HELP?**
- **IS YOUR EQUIPMENT OVERTAXED?**
- **HAVE YOU A FORMULATION OR COMPOUNDING PROBLEM?**

Our facilities and services, including our well qualified staff working with the latest stainless steel equipment in a thoroughly modern laboratory, are available to prevent or break your production bottlenecks.

We're ready and anxious to function for you in blending, compounding, filling or bottling . . . or in any combination of these . . . or for formulating and packaging for private labels.

So if your requirements are rather substantial, we'll look forward to your request for full information.

ADVANCED Cosmetics inc.
38-31 CRESCENT STREET
LONG ISLAND CITY, N. Y.
Private Brands

HENRI ROBERT INC.

To AMERICAN PERFUMERS
Who Want Success Through Quality

HENRI ROBERT Inc.

Distinctive American raw materials for perfume . . . in the French tradition

39 WEST 60TH ST., NEW YORK 23, N. Y.

CABLE ADDRESS HENROBERT TELEPHONE: CIRCLE 5-8521 CODES: A.B.C. 5TH & 6TH EDITION

Exclusive representative in the Western Hemisphere for:

SYNAROME
S.A.R.L. au Capital de 1.000.000 de Francs

LABORATOIRES SYNAROME
Asnieres (Seine)

CREATORS OF THE FINEST MODERN AROMATIC SPECIALTIES USED DURING THE PAST DECADE IN MANY OF THE MOST SUCCESSFUL PERFUMES

AMBRAROME
ANIMALIS
CARDAMINE
PHENYLAL
TUBERIDIS
CIVETTAROME
CUIR DE RUSSIE
CUIR 445
CUIR H.F.
ALDECUIR

LES FILS DE
JOSEPH ROBERT
91 RUE DE L'UNIVERSITE
PARIS VII

SPECIALISTS IN FLORAL PRODUCTS
FROM GRASSE

ABSOLUTES OF EXCEPTIONAL QUALITY MANUFACTURED FROM THE PRINCIPLES DEVELOPED IN 1890 BY JOSEPH ROBERT

JASMIN
ROSE
ORANGER
CASSIE
JONQUIL
NARCISSUS
TUBEROSE
OAK MOSS
IRIS
VIOLET

HENRI L. ROBERT

CREATEUR DE PARFUMS

WILL PERSONALLY HELP YOU UTILIZE THESE THREE SOURCES OF OUTSTANDING RAW MATERIAL AND ENABLE YOU TO DEVELOP MODERN PERFUMES OF BEST QUALITY AND HIGHEST SALES APPEAL.

UP-TO-DATE FACTS ABOUT SONNEBORN

White Oils, Petrolatums and Specialties

that will help you in cosmetic product development

Leading cosmetic manufacturers have long standardized on SONNEBORN White Oils, Petrolatums and Petroleum Specialties . . . convincing evidence of the unsurpassed Quality, Purity and Stability of these highly refined ingredients, a few typical end-uses of which are shown at the right.

The broad research facilities of the SONNEBORN laboratories, backed by 65 years of refining experience, are available for aid in solving current production problems and in the development of new cosmetics.

•

SONNEBORN PRODUCTS FOR QUALITY COSMETICS

WHITE MINERAL OILS

CARNATION • KLEAROL
KAYDOL — U. S. P. Heavy • ORZOL — U. S. P. Heavy • PROTOL — U. S. P. Heavy • ERVOL — U. S. P. Light • BLANDOL — U. S. P. Light

PETROLATUMS U. S. P.

TYPE I: Medium Consistency – White Protopet
Yellow Protopet and other colors
TYPE II: Soft Consistency – White Fonoline – Yellow Fonoline
TYPE III: Medium Consistency with High Melting Point – White Perfecta

SPECIALTIES

DEO-BASE – Light hydrocarbon distillate refined to complete freedom from kerosene odor
SONO-JELL – Complete series for liquefying cleansing creams, pomades, etc.
TRI-OL – Base for soapless oil shampoos and soap-sensitive skin cleansers
SONAQUOL – Water-miscible white mineral oil for use in hand lotions and cleansing creams

•

Check the coupon (marking appropriate key letters) to receive free technical data on subjects of most immediate interest to you.

White Oil and Petrolatum Division — **L. SONNEBORN SONS, INC.**
Dept. DC, 88 Lexington Avenue, New York 16, N. Y.

Gentlemen: Please send latest technical data on Sonneborn products for end-uses checked (refer to illustrations for key letters):

☐ C1 ☐ C2 ☐ C3 ☐ C4 ☐ C5 ☐ C6 ☐ C7 ☐ C8 ☐ C9 ☐ C10 ☐ C11 ☐ C12

Name .....

Company .....

Address .....

City ..... P.O. Zone ..... State .....

WHITE OIL AND PETROLATUM DIVISION

L. SONNEBORN SONS, INC.

88 LEXINGTON AVENUE, NEW YORK 16, N. Y.

Stocks carried in principal cities.

Refineries: Petrolia and Franklin, Pa. • Branch Offices: Chicago, Baltimore, Philadelphia and Los Angeles • In the Southwest: Sonneborn Bros., Dallas 1, Texas

YOUR SEAL OF PRODUCT PROTECTION

"Stamp on your mind"...this Atlas label that can be trusted now and always.

On whichever one of a vast variety of H. Kohnstamm products you find it, its meaning stays the same: Quality, service, unfaltering public acceptance—*96 years of it!*

On Atlas Certified Colors it stands for *unquestioned strength, uniformity and brilliance*—quality at its highest!

Simple or difficult—the vast laboratory facilities of H. Kohnstamm are readily available to accommodate your individual requirements.

THE ATLAS LABEL PROTECTS YOU

FIRST PRODUCERS OF CERTIFIED COLORS

H. KOHNSTAMM & COMPANY Inc.

ESTABLISHED 1851

89 PARK PLACE, NEW YORK 7 · 11-13 E. ILLINOIS ST., CHICAGO 11 · 4735 DISTRICT BLVD., LOS ANGELES 11

ATLANTA · BALTIMORE · BOSTON · CINCINNATI · CLEVELAND · DALLAS · DETROIT · HOUSTON · INDIANAPOLIS · KANSAS CITY, MO. · MINNEAPOLIS · NEW ORLEANS · OMAHA · PHILADELPHIA · PITTSBURGH · ST. LOUIS · SAN FRANCISCO

Season's Greetings

The entire staff of Dr. Alexander Katz & Company, F. Ritter & Company, Essential Aromatics Corporation, wishes their numerous friends and clients hearty greetings of the Season.

"Our Research Laboratory Is At Your Disposal"

DR. ALEXANDER KATZ & CO.

4641-43 HOLLYWOOD BOULEVARD, LOS ANGELES 27, CALIF.
948 HOWARD STREET, SAN FRANCISCO 3, CALIFORNIA
PLANT: GLENDALE, CALIF.

F. RITTER & CO.

4641-43 HOLLYWOOD BOULEVARD, LOS ANGELES 27, CALIF.
948 HOWARD STREET, SAN FRANCISCO 3, CALIFORNIA

ESSENTIAL AROMATICS CORP.

304 EAST 23rd STREET, NEW YORK 10, N. Y.

DALLAS 1 • NEW ORLEANS 13 • SEATTLE 22 • RITTER & COMPANY (Canada), Ltd.

test tubes and chemicals,
research and science for

peace, happiness and a
better world,

for good will to all men

FELTON CHEMICAL COMPANY INC.
MANUFACTURING CHEMISTS
599 JOHNSON AVE., BROOKLYN 6, N. Y.

AROMATIC CHEMICALS
FLAVORS

FELTON
Quality

ESSENTIAL OILS
PERFUME OILS

Emulsifiers

OF QUALITY AND UNIFORMITY

NOW READILY AVAILABLE

FOR SOAPLESS, NEUTRAL AND ACID EMULSIONS

TEGIN — Glyceryl Monostearate—Self emulsifying. For neutral greaseless creams, lotions and ointments.

TEGACID—Glyceryl Monostearate—Acid emulsifying. For greaseless anti-perspirant creams and ointments.

TEGIN P — Propylene Glycol Monostearate — Self emulsifying. For brushless shave creams, greaseless creams, lotions, ointments and cosmetic stockings.

TEGIN 515 — Glyceryl Monostearate — Non-emulsifying.

•

PRESERVATIVES *Esters of Parahydroxybenzoic Acid*

TEGOSEPT E TEGOSEPT M TEGOSEPT P BENZYL TEGOSEPT BUTYL TEGOSEPT

LANOLIN ABSORPTION BASES

PROTEGIN X—*For Nite Creams and Ointments.*

ISO-LAN—*For Creams, Lotions and Ointments.*

GOLDSCHMIDT

CHEMICAL CORPORATION

153 WAVERLY PLACE, NEW YORK 14, N. Y

SALES REPRESENTATIVES

MONTREAL BOSTON LOS ANGELES CHICAGO ST. LOUIS TORONTO

Smells that Sell

Products that smell good, sell good!

This inviting truth is basic in your business, since the principle of chemical attraction often defines the path to added sales.

Ethavan, Methyl Salicylate, U. S. P. (Synthetic), Benzyl Benzoate, U. S. P. and Coumarin Monsanto will increase the sales appeal of your products. These Monsanto synthetic aromatics are used as fixatives, and to impart or accent intriguing odors. They are superior because of their true aroma, uniformity, unvarying strength and "staying" power.

For full information and samples of these Monsanto synthetics, mail in the coupon below or contact your nearest District Sales Office. MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 South Second Street, St. Louis 4, Missouri . . . District Sales Offices: New York, Chicago, Philadelphia, Boston, Cleveland, Cincinnati, Detroit, Charlotte, Birmingham, Houston, Los Angeles, San Francisco, Seattle. In Canada: Monsanto (Canada) Limited, Montreal.

Ethavan: Reg. U. S. Pat. Off.

MONSANTO
CHEMICALS AND PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND

Monsanto Chemical Company
1700 South Second Street
St. Louis 4, Missouri

Please send me: DC12

Literature	Samples	Product
( )	( )	Ethavan
( )	( )	Methyl Salicylate, U.S.P. (Syn.)
( )	( )	Benzyl Benzoate, U.S.P.
( )	( )	Coumarin Monsanto

Name.....

Firm.....

Address.....

City..... State.....

AMERICAN DISTILLED OILS

PRODUCED AT OUR BROOKLYN FACTORY

ROSE ABSOLUTE

Clove	Balsam Peru	Opoponax
Nutmeg	Patchouli	Pimento
Orris Liquid, Conc.	Celery	Olibanum
Cascarilla	Styrax	Sandalwood

also

Linalool	Citral	Eugenol	Geraniol
	Rhodinol	Citronellol	

RESIN LIQUIDS

Olibanum	Orris	Balsam Peru
Labdanum		Balsam Tolu
Opoponax	Styrax	Tonka

Essential Oils • Aromatic Chemicals • Perfume Materials • Colors

GEORGE LUEDERS & CO

427 WASHINGTON STREET, NEW YORK 13, N. Y.

CHICAGO • SAN FRANCISCO • MONTREAL • ST. LOUIS • PHILADELPHIA • LOS ANGELES • TORONTO

ESTABLISHED 1885

To our many friends of the industry, in this and in other lands, we extend our best wishes for a Merry Christmas and a happy and healthful New Year.

PENNSYLVANIA GLASS PRODUCTS CO. INC.

PITTSBURGH, PENNSYLVANIA, U.S.A.

DECEMBER 1947

AMERICAN DISTILLED OILS

PRODUCED AT OUR BROOKLYN FACTORY

ROSE ABSOLUTE

Clove	Balsam Peru	Opoponax
Nutmeg	Patchouli	Pimento
Orris Liquid, Conc.	Celery	Olibanum
Cascarilla	Styrax	Sandalwood

also

Linalool	Citral	Eugenol	Geraniol
	Rhodinol	Citronellol	

RESIN LIQUIDS

Olibanum	Orris	Balsam Peru
Labdanum		Balsam Tolu
Opoponax	Styrax	Tonka

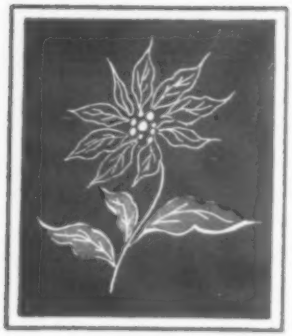
Essential Oils • Aromatic Chemicals • Perfume Materials • Colors

GEORGE LUEDERS & CO

427 WASHINGTON STREET, NEW YORK 13, N. Y.

CHICAGO • SAN FRANCISCO • MONTREAL • ST. LOUIS • PHILADELPHIA • LOS ANGELES • TORONTO

ESTABLISHED 1885



To our many friends of the industry, in this and in other lands, we extend our best wishes for a Merry Christmas and a happy and healthful New Year.

PENNSYLVANIA GLASS PRODUCTS CO. INC.

PITTSBURGH, PENNSYLVANIA, U.S.A.

DECEMBER 1947

AMERICAN DISTILLED OILS

PRODUCED AT OUR BROOKLYN FACTORY

ROSE ABSOLUTE

Clove	Balsam Peru	Opoponax
Nutmeg	Patchouli	Pimento
Orris Liquid, Conc.	Celery	Olibanum
Cascarilla	Styrax	Sandalwood

also

Linalool	Citral	Eugenol	Geraniol
	Rhodinol	Citronellol	

RESIN LIQUIDS

Olibanum	Orris	Balsam Peru
Labdanum		Balsam Tolu
Opoponax	Styrax	Tonka

Essential Oils • Aromatic Chemicals • Perfume Materials • Colors

GEORGE LUEDERS & CO

427 WASHINGTON STREET, NEW YORK 13, N. Y.

CHICAGO · SAN FRANCISCO · MONTREAL · ST. LOUIS · PHILADELPHIA · LOS ANGELES · TORONTO

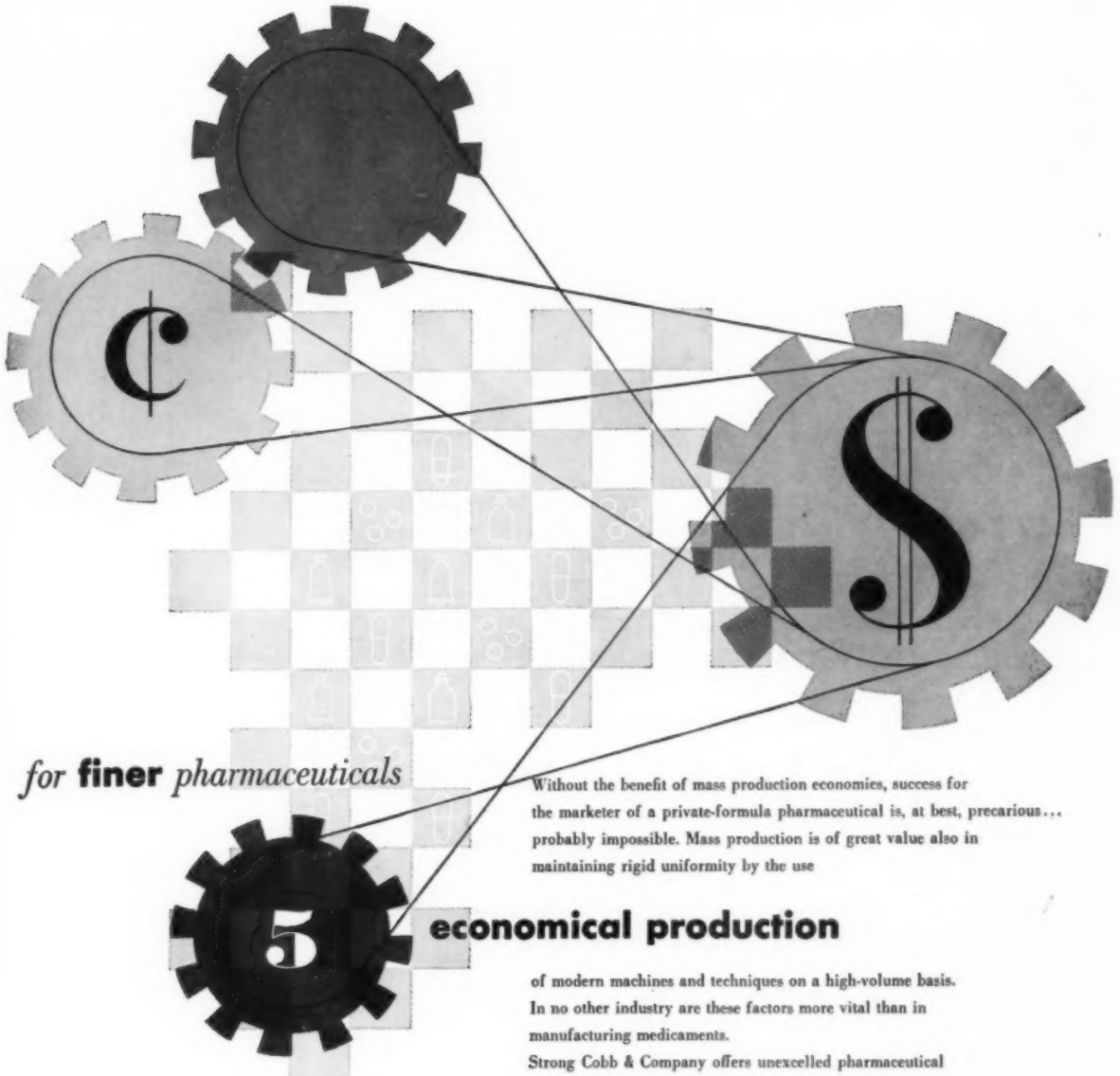
ESTABLISHED 1885

To our many friends of the industry, in this and in other lands, we extend our best wishes for a Merry Christmas and a happy and healthful New Year.

PENNSYLVANIA GLASS PRODUCTS CO. INC.

PITTSBURGH, PENNSYLVANIA, U.S.A.

DECEMBER 1947



for **finer** *pharmaceuticals*

Without the benefit of mass production economies, success for the marketer of a private-formula pharmaceutical is, at best, precarious... probably impossible. Mass production is of great value also in maintaining rigid uniformity by the use

5 economical production

of modern machines and techniques on a high-volume basis. In no other industry are these factors more vital than in manufacturing medicaments.

Strong Cobb & Company offers unexcelled pharmaceutical engineering service to the marketer of private-formula products. Our plant, manned by an outstanding staff of technicians, assures the utmost economy consistent with fine quality.

Whether you are considering immediate or future production, our technical sales director will be pleased to talk over your manufacturing problems with you.

Strong Cobb & Company, Inc.

2654 Lisbon Road, Cleveland 4, Ohio

Your Problem (1) *Thorough Research*

Our Services
- (2) *Production Advice*
- (3) *Precision Manufacturing*
- (4) *Rigid Laboratory Control*
- (5) *Economical Production*
- (6) *The* LITTLE *Things*

Let CALCO supply you . . . Mandelic Acid . . . Calcium Mandelate

CALCO's Bulk Pharmaceuticals

Sulfadiazine U.S.P.
(powder and micro crystal)
. . . the Sulfa drug of choice
Sodium Sulfadiazine U.S.P.
Sulfamerazine U.S.P.
(powder and micro crystal)
Sodium Sulfamerazine U.S.P.
Sulfanilamide U.S.P.
(powder, crystal and micro crystal)
Sulfathiazole U.S.P.
(powder, crystal and micro crystal)
Sodium Sulfathiazole U.S.P.
Sulfapyridine N.F.
Sodium Sulfapyridine
Aminoacetic Acid N. F.
Calcium Pantothenate (Dextro)
Choline Chloride
Choline Dihydrogen Citrate
Cinchophen N.F.
(and Sodium Salt)
Neocinchophen U.S.P.
Mandelic Acid N.F.
Calcium Mandelate U.S.P.
Menadione U.S.P.
Methylene Blue U.S.P.
(powder and crystal)
Nicotinic Acid U.S.P.
Nicotinamide U.S.P.
Saligenin
Thiouracil
Propylthiouracil
Phenothiazine N.F.
(Regular and Drench grades for Veterinary use)
Certified Colors for Pharmaceutical and Cosmetic Use

Mandelic Acid is an effective urinary antiseptic which may be used as an alternative to the more potent sulfonamides. It is especially effective against colon bacilli (Escherichia coli), Aerobacter aerogenes, Streptococcus faecalis, Staphylococcus aureus and other organisms when the acidity of the urine is maintained at a pH of 5.5 or less. The employment of the calcium salt obviates, in many cases, the necessity of administering an acidifying agent. Calcium Mandelate is well tolerated by the stomach.

★ *Precise and complete analytical control*

★ *Technical bulletins available*

★ *A technical service ready to assist in application problems.*

Represented in Canada by Calco Chemical Division
North American Cyanamid, Limited
P. O. Box 10, St. Lambert, Montreal 23, P. Q.
Royal Bank Bldg., Toronto 1, Ontario

Pharmaceutical Department

Calco

REG. U. S. PAT. OFF.

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
Bound Brook, New Jersey

How SHEFFIELD MILK CHEMICALS can help you

If you make tablets, pills, medicines or baby foods, here is what Sheffield—as a century-old name in milk, and the latest word in milk chemicals—offers you:

- **World's largest selection of milk chemicals*** List below
- **Highest quality and uniformity**
- **Research facilities of the National Dairy Products Corp.**
- **Free consulting service**
- **Sure supply, year round**
- **Prompt delivery, world-wide shipment**

We will be glad to send you free samples, technical information and prices. Write to Chemurgic Division, Sheffield Farms Company, Inc., 524 West 57th Street, New York 19, N.Y., or phone COlumbus 5-8400.

Sheffield LACTOSE (MILK SUGAR) USP • Sheffield LACTOSE (MILK SUGAR) EDIBLE

Both pure white powders, identical except that "edible" is just short of meeting USP standards. For any product not requiring USP labeling, Sheffield LACTOSE (MILK SUGAR) EDIBLE, at 2c per lb. less than USP, is a splendid buy.

All Sheffield LACTOSE (MILK SUGAR) gives you these advantages:
1. Non-hygroscopic 2. More food value than other source sugars

"Edamin"—tryptic digest of lactalbumin
"N-Z-Amine"*
Bulk Casein Peptone
"N-Z-Case"*—laboratory casein peptone
"N-Z-Tone"*—laboratory lactalbumin peptone
"Hy-Case"*—acid digest of casein
Caseins for various uses

"De-Vitaminized" Casein*
Lactose USP
Lactose Impalpable USP
Lactose Edible
Calcium Lactate USP
Sodium Lactate

SHEFFIELD FARMS COMPANY, INC.

SHEFFIELD MILK CHEMICALS

WORLD'S MOST COMPLETE LINE

CHEMURGIC DIVISION

Division of National Dairy Products Corporation

*Trade-mark of Sheffield Farms

What big U. S. business started in 1847?

ONE HUNDRED YEARS AGO, the first issue of U. S. postage stamps marked the beginning of our modern postal system.

Starting in 1847 with 50 thousand dollars in stamps, the United States Post Office Department today handles billions of dollars in postage, money orders and postal savings every year.

What CSC activity dates back 100 years?

IN 1847, George Ross built a distillery on the banks of the Ohio River to ferment alcohol from the corn grown in rich, loamy Indiana soil.

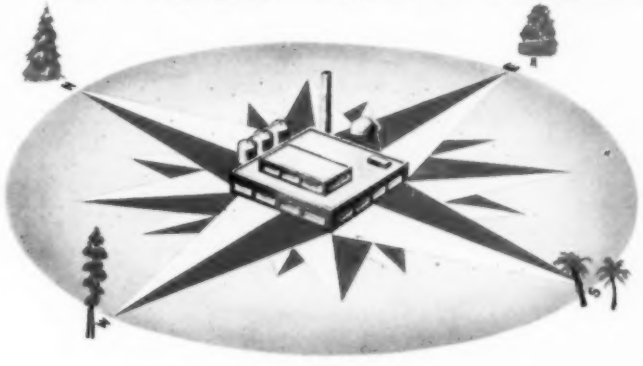
From this small beginning grew CSC Rossville alcohols, which today do hundreds of jobs for industry, from protecting your car's radiator in winter to safeguarding the fragrance of the most delicate perfumes. Alcohol is one of more than two hundred CSC chemical products serving the doctor, the farmer, the manufacturer and the motorist.

CSC

COMMERCIAL SOLVENTS CORPORATION
17 EAST 42ND STREET • NEW YORK 17, N. Y

OUR PLANTS BLOOM THE YEAR 'ROUND

...IN YOUR BACK YARD!



...so when it's Basic Chemicals for American Industry

call on GENERAL CHEMICAL first!

General Chemical Producing Works include.

ATLANTA WORKS
East Point, Ga.
BAKER & ADAMSON WORKS
Marcus Hook, Pa.
BALTIMORE WORKS
Baltimore, Md.
BATON ROUGE WORKS
Baton Rouge, La.
BAY POINT WORKS
San Francisco (Port Chicago), Calif.
BOSTON WORKS
Medford, Mass.
BUFFALO WORKS
Buffalo, N. Y.
CALUMET WORKS
Chicago (Hegewisch), Ill.
CAMDEN WORKS
Camden, N. J.
CHILLICOTHE WORKS
Chillicothe, Ohio
DELAWARE WORKS
North Claymont, Del.
DEMING WORKS
Deming, N. M.
DENVER WORKS
Denver, Colo.
DETROIT WORKS
Detroit (River Rouge), Mich.
EAST ST. LOUIS WORKS
East St. Louis, Ill.
EL SEGUNDO WORKS
Los Angeles (El Segundo), Calif.
FRONT ROYAL WORKS
Front Royal, Va.
HUDSON RIVER WORKS
Edgewater, N. J.
JACKSONVILLE WORKS
Jacksonville, Fla.
JOHNSONBURG WORKS
Johnsonburg, Pa.
KALAMAZOO WORKS
Kalamazoo, Mich.
MENASHA WORKS*
Menasha, Wisc.
MIDDLETOWN WORKS
Middletown, Ohio
MONROE WORKS
Monroe, La.
NATIONAL WORKS
Cleveland, Ohio
NEWELL WORKS
Newell, Pa.
NEW ORLEANS WORKS
Marrero, La.
PULASKI FOUNDRY
Pulaski, Va.
PULASKI WORKS
Pulaski, Va.
RICHMOND WORKS
San Francisco (Richmond), Calif.
SAVANNAH WORKS
Savannah, Ga.
VANCOUVER WORKS
Vancouver, Wash.
WISCONSIN RAPIDS WORKS*
Wisconsin Rapids, Wisc.

*General Chemical Company, Inc.

At every point in the compass . . . wherever Industry is centered . . . there is a General Chemical producing works or distributing station serving the territory. To supply Industry's requirements across the country, General Chemical has 33 major producing locations from which pour a steady stream of essential chemicals.

These include acids—alums—sodium compounds—fluorine derivatives—other heavy chemicals—as well as reagents, fine and pharmaceutic chemicals. Thus, coast to coast, a full flow of this broad and varied range of products, so necessary to peak production, is assured.

That is why . . . in every branch of Industry everywhere . . . the choice is General Chemical *first* in "Basic Chemicals for American Industry."

BASIC CHEMICALS
FOR AMERICAN INDUSTRY

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
Offices Serving Industry from Coast to Coast

Penn-Drake *Specialized* PETROLEUM PRODUCTS

made to meet your particular requirements

Your exact specifications are our guide

Whether your need is a standard petroleum product or something out-of-the-ordinary in the line of special formulas, Penn-Drake is exacting in the manufacture of products which fill precisely your specifications. Penn-Drake can provide petroleum products with special melting points, colors, specified pour points or viscosities, or other qualities to fill your needs. Penn-Drake's specialized service applies to all types of petroleum products, whether they differ from standardized grades or not.

Complete line of Petroleum Products

Penn-Drake manufactures all types of petroleum products including both U.S.P. and Technical grades of White Oils, all colors and grades of Petrolatums, deodorized insecticide bases, petroleum sulfonates, deodorized and other naphthas, waxes, industrial and motor lubricants and greases, and fuel oils. Whether your need is one of the standard Penn-Drake products or some specialized product, the same standards of purity, dependability and uniformity are maintained in its manufacture.

Our SKILL and EXPERIENCE are your protection

For more than three-quarters of a century Penn-Drake has been a manufacturer of highest grade petroleum products. And its finest tradition is that one which insures dependable purity, exacting uniformity and high quality in all of its products. Our skill and experience plus the finest grades of Pennsylvania crude oil guarantee you a successful finished product.

penn drake petroleum products

Refineries: Karns City and Titusville, Penna.

Branches: Cleveland, Ohio; Edgewater, N. J.

Sales Offices In All Principal Cities

PENNSYLVANIA REFINING CO.

BUTLER, PENNA.

Warehouse Stocks carried in: Atlanta · Boston · Chicago · Dallas · Detroit · Los Angeles · Milwaukee · Minneapolis · Montreal · Nashville · Oklahoma City · Omaha · Petersburg, Va. · Philadelphia · St. Louis · San Francisco · Toronto · Trussville, Ala.

The joyous spirit of the Yuletide inspires us to wish you a Merry Christmas and a Happy New Year

in the hope that 1948

may bring you an overflowing measure

of cheer and prosperity.

Synfleur Scientific Laboratories, Inc. Monticello, N.Y.

REG. U.S. PAT. OFF.

FOUNDED 1889 BY ALOIS VON ISAKOVICS

ATLANTA • DETROIT • HAVANA • RIO DE JANIERO • MEXICO, D.F.

Chicago . Melbourne . Burma . Hong Kong . Bogota . San Jose . Ciudad Trujillo . Guayaquil . Guatemala City
Calcutta . Wellington . Managua . Panama . Asuncion . Manila . San Salvador . Montevideo

NEW YORK CITY EXPERIMENTAL LABORATORY—509 MADISON AVENUE, NEW YORK 22, N. Y.—ELDORADO 5-4757

Merry
Christmas
MALLINCKRODT CHEMICAL WORKS
80 YEARS OF SERVICE TO CHEMICAL USERS
MALLINCKRODT ST., ST. LOUIS 7, MO., 72 GOLD ST., NEW YORK 8, N.Y.
Chicago • Cincinnati • Cleveland • Los Angeles • Montreal • Philadelphia • San Francisco
UNIFORM DEPENDABLE PURITY

"Frankly, I'm sick of the whole Dram business!"

KEEPING POSTED

Court Holds Quaranty Does Not Apply

THE U. S. Circuit Court of Appeals in Chicago recently sustained a decision of the U. S. District Court for the northern district of Illinois, eastern division, which held that Parfait Powder Puff Co. was guilty of introducing into interstate commerce even though the products were made for Parfait by another company. Parfait claimed that they were not responsible since the products were made, packaged, and distributed by the other company under contract. Parfait supplied the maker with jars, caps, labels, display cards, flannel pads and shipping containers, and the maker impregnated the pads with a shellac lacquer, placed them in labeled jars, bearing Parfait's name, shipped the packages in accord with the directions of Parfait, consigned by Parfait to its purchasers as consignees, and rendered the bills to Parfait. During the course of the contract, the maker substituted a gum for the shellac, claiming it was impossible to obtain shellac. This was done without Parfait's knowledge, and as soon as Parfait learned of this substitution, the shellac was forbidden. The gum proved deleterious, according to the court. Parfait argued that the violation was that of the maker. They contended that the maker was not their agent, but an independent contractor for whose acts they were not responsible. The court said that it was not concerned with any distinction between independent contractors and agents in the ordinary sense of the word. The court stated:

"It is clear that the defendant was engaged in procuring the manufacture and distribution of the article in interstate commerce. It saw fit to create out of the maker's activities in its behalf an instrumentality which effected an introduction into interstate commerce of an adulterated article violative of the standards fixed by the act. This we think it could not do without incurring the criminal penalty imposed by the statute. The liability was not incurred because defendant consciously participated in the wrongful act, but because the instrumentality which it employed, acting within the powers which the parties had mutually agreed should be lodged in it, violated the law. The act of the instrumentality is controlled in the interest of public policy by imputing the act to its creator and imposing the penalty upon the latter."

The Court agreed that this doctrine would result in hardship to individual manufacturers, but claimed that Congress, in enacting the law, had weighed this type of hardship against the alternative type of hardship—hardship to the innocent purchasing public.

"When the defendant engaged in manufacture and distribution of cosmetics in commerce, there was in force this statute, enacted as a matter of public policy for the protection of the purchasing public. Defendant knew that the goods would pass into commerce. It knew that if these goods violated the provisions of the act, liability would be incurred. This liability it could not shift to the instrumentality which it had created for the purpose of accomplishment of the completed transaction of manufacture, distribution, and sale. Rather defendant was bound to see that its product, when introduced into commerce, was not antagonistic to and violative of the sovereign will, which, expressed in the act of Congress, enters into and becomes a part of all contracts relating to the production and distribution of articles in commerce.

"The person who brings goods into commerce, by whatever means or implements, is bound to see that the commodity thus put in commerce is not beyond the pale of the legislative act. In other words, one who owes a certain duty to the public and entrusts its performance to another, whether it be an independent contractor or agent, becomes responsible criminally for the failure of the person to whom he has delegated the obligation to comply with the law, if nonperformance of such duty is a crime. Defendant may not put into operation forces effectuating a placement in commerce of a prohibited commodity in its behalf and then claim immunity because the instrumentality it has voluntarily selected has failed to live up to the standards of the law."

Brand Name Awards

IN BOSTON the Brand Names Foundation awarded Certificates of Public Service upon Father John's Medicine Co. for ninety-two years promotion of Father John's Medicine; upon Lydia E. Pinkham Medicine Company for seventy-two years promotion of Lydia E. Pinkham Vegetable Compound; and upon Potter Drug & Chemical Corp. for sixty-nine years promotion of Cuticura soap and ointment.

Separate Circulars and the FDA

THE question of whether literature shipped separately from drug products constitutes labeling under the Food, Drug, and Cosmetic Act will have to be decided by the U. S. Supreme Court since various U. S. Circuit Courts of Appeals are not in agreement in their decisions. A decision in the U. S. Circuit Court of Appeals in Chicago ruled in favor of the contention of the Food and Drug Administration that the literature shipped separately is labeling even when there is an appreciable time lag between the shipment of the goods and the shipment of the literature. However, the U. S. Circuit Court of Appeals in San Francisco ruled some months ago in the Alberty case that labeling must physically accompany products and that, being a criminal statute, the Act must be strictly construed. The U. S. Circuit Court of Appeals in Atlanta upheld the Alberty decision and reversed a lower court which upheld seizure of a device alleged to be misbranded because of statements made in literature shipped several weeks later and by a different method. The Atlanta court said plainly that "accompanying means to go along with" and that "in a criminal statute the meaning cannot be stretched."

Molasses Prices Up Again

THE highest price since April was paid for molasses last month in sealed bids to the government, 31.02 cents per gallon. Also last month 1,800,000 gallons were bid in by a distiller at 30.76 cents per gallon, and another lot of like amount at 30.89 cents.

Norwich Salesmen Quit Union

NORWICH Pharmacal Company salesmen of the eastern district recently asked to have the union which they had been affiliated decertified. A petition signed by fourteen of these salesmen, out of a total of twenty-two, said that they wanted to bargain individually with the company. A hearing was held on the petition and Victor Rabinowitz, attorney for Local 65, Drug Trade Salesmen Division of the Wholesale and Warehouse Workers Union, an affiliate of CIO, sent a telegram to the hearing stating that the union does not represent a majority of the employees of the concern and has no further interest in representing any of them. A letter from the union to the company stated that the union would not attempt to renew its present contract.

Baruch for Compulsory Health Insurance

NO LESS a national figure than Bernard M. Baruch has declared himself in favor of a compulsory health insurance plan partly financed by the Federal government. "As to financing," said Mr. Baruch in addressing the Associated Hospital Service—the Blue Cross Plan—and its affiliate, the United Medical Service, in New York, "my own preference runs toward the government meeting only part of the cost, with part coming from pay-roll deductions from employers and workers. A form of compulsory health insurance can be devised, adequately safeguarded, without involving what has been termed 'socialized medicine.' The needs can be met—as in other fields—without the government taking over medicine, something I would fiercely oppose. I do not fear government taking its legitimate part in medicine, anymore than I fear it in education or housing. There should be just one Federal agency, with Cabinet rank, for all health and human welfare problems. I do not like government agencies to be like Mahomet's coffin, suspended between heaven and earth." Other recommendations by Mr. Baruch to solve other problems facing the doctors of this country are:

"More and better doctors—in more places; an immediate survey to modernize medical education with greater emphasis on chronic and degenerative diseases, mental hygiene, and preventive medicine; more hospitals, more evenly spread through the country; less specialists, more general practitioners; reorganize medical practice, stressing group medicine; increased medical research; greatly expanded physical and mental rehabilitation; a vigorous preventive medical program, reaching children, above all; creation of a non-political 'watchdog' committee to safeguard progress in medical care for veterans; increased numbers of well-trained nurses and technicians; adequate dental care, and a stabilizing economy—inflation will make worthless any health program or anything else."

How Mr. Baruch thinks compulsory health insurance can be established with funds collected and given by the Federal government without the Federal government taking over medicine, is more than we can fathom.

Quinine Allowed for Export

ABOUT the middle of last month, the government lifted the embargo established in April, 1942 on quinine exports and established an export quota for the last quarter of this year of 250,000 ounces of quinine sulfate and 50,000 ounces of quinine hydrochloride in bulk. This was made possible by increased importation of supplies of so-called "free quinine" through private channels. Exports of "free quinine" will therefore not involve release of quinine from the government stockpiles, according to the Office of International Trade, Department of Commerce.

Commissioner Freer Warns Advertisers

LAST month Federal Trade Commissioner Freer suggested that advertisers pay increasing attention to supplying factual information to consumers. If advertisers turn a deaf ear to such requests, he warned, "polite consumer agitation may become a roar for establishment of a government information agency which would by-pass advertisers. Like many other consumers, I keep looking for signs that the trend observed today in many industries toward more informative advertisers is a general one. Advertising cannot be considered as a substitute for honest market information. I imply no blanket condemnation of advertisements or commercials solely because they stress the subjective or emotional values; but, as the scope of these values is enlarged in a particular advertisement, the greater becomes the need for relevant truth as a competent guide to use the products. As packaging becomes more general, for example, consumers are less and less able to confirm their impressions by pre-sale use of the senses of touch, taste, or sight."

Atom Science Saves More Lives Than Lost

"MEDICALLY applied atomic science has already saved more lives than were lost in the explosions at Hiroshima and Nagasaki," according to Cecil Forbes Hanna, of Walla Walla, Wash., writing in Hygeia. Used to trace the behavior of the blood in various chemical solutions, radioactive isotopes helped to discover the preservative that keeps blood cells alive long enough to make the blood bank system possible. The same tracer technic prevents many needless amputations by determining when blood circulation to an injured arm or leg is unimpaired. The supposedly incurable disease called leukemia, in which the bone marrow produces abnormally large numbers of white blood cells, are all conditions which have been alleviated by atom therapy. Current researches on radiations and cancer promises even more for the future, according to Mr. Hanna.

Back Seizure Amendment and More Pay for FTC

THE excutive committee of Section on Food, Drug and Cosmetic Law of the New York State Bar Association has unanimously voted to recommend to the Section approval of H. R. 4071 at its next meeting on January 22, 1948. This bill principally makes the well-known seizure amendment of the Federal Food, Drug, and Cosmetic Act, which the Federal Security Administrator recommended and the House Committee on Interstate and Foreign Commerce has unamimously reported for enactment. The executive committee has also unanimously approved the report of a special committee headed by James F. Hoge, which committee recommended approval of H. R. 3751 which increases the salaries of the Federal Trade Commissioners from $10,000 to $15,000 per annum.

Chemistry and War

IN ACCEPTING the 1947 Chemistry Industry Medal, George W. Merck, president of Merck & Co., and former head of this country's biological warfare program, warned that no single weapon of war—chemical, biological, or atomic—can be indefinitely controlled. Abolition of war itself and all its weapons represents the only certain way to protect civilization from the modern agents of destruction, according to Mr. Merck. American science must play an increasingly major role in keeping this nation prepared to ward off attacks while every effort is made to outlaw war. American science also faces a tremendous responsibility in helping to conquer the famine now stalking a large part of the earth, he said, adding that the chemical industry, in particular, already has done much to raise the standard of living abroad as well as at home, "and will in Europe again if events do not outrun recovery." There is grave danger, however, that America will not move fast enough to save Europe, Mr. Merck declared. Two years ago the War Department decided to make the results of biological warfare research available to the scientific world in accepted medical journals, withholding only information necessary for defense and military use, Mr. Merck said, pointing out that the basic purpose of science remains that of serving humanity, not destroying it.

German Schering Back in Production

SCHERING, the largest chemical firm in Eastern Germany, is reported again to be turning out nearly all its prewar patented drug products and is now producing penicillin. About 3,600 people are employed by the company. Demand for products is larger than the supply, and insulin is especially in short supply. This is because of the small number of slaughterings. The company is now trying to establish its former export connections, and inquiries and orders are coming from countries as far distant as China, India, and Portuguese West Africa. Schering's four plants, located in the British, French, and Soviet sectors of Berlin, were badly damaged by bombing during the war. However, the occupation powers, interested in the part the firm can play in maintaining public health, have given all possible help to rehabilitation.

Toiletine Gets Brand Names Award

TOILETINE LOTION, manufactured by the Toiletine Company, of Greenfield, Mass., since 1890, was among the nine brand names which received a Certificate of Public Service from Brand Names Foundation for 50 or more (57) consecutive years of "service to the American consumer." The certificate was presented to C. F. Ulrich, president of the company, by Henry E. Abt, president of Brand Names Foundation.

Apathy Toward Tariff Changes

WHILE businessmen of today are confronted with so many other problems that they do not want to give a thought to tariffs, the entire tariff situation is being so basically changed, that when they do want to think about tariffs, it will probably be too late to do anything about the situation. It will be remembered that during President Roosevelt's time in office, a bill was enacted in Washington giving the president the right to cut tariffs by fifty per cent at will. At a later date another bill was enacted giving the president of this country the right to make further tariff cuts of fifty per cent at his discretion. If the full extent of the tariff reductions permitted by both actions of Congress were exercised, the cuts would be a full 75 per cent. Now an effort is under way to have Congress vote extension of these cuts. However, in the meanwhile, the United States entered into tariff agreements at Geneva under the International Trade Organization of the United Nations. This is the source of the latest tariff announcement. This agreement completely bypasses the law which formerly had to be reenacted to keep the tariff reductions in force. So whatever action Congress takes on extension of the law, the Geneva agreement runs for a full three years from January 1, next. At the present time everyone is so busy making goods and filling orders for both domestic consumption and for export, that tariff changes will have practically no effect upon their businesses at the moment. But what might happen over the next three years during which the agreement extends, might be another story. Tariffs have always been vital to this country, but with so many other problems facing the people of this nation today, it would be most difficult to get an appreciable extent of the people worked up over practically any action that is being taken with regard to tariffs.

FTC Inspects Advertising

THE FEDERAL TRADE COMMISSION, according to Commissioner Freer, in the past fiscal year examined 641,402 broadcast continuities, and 9,573 were marked for further study. When it is realized that 9,573 is not quite 1.5 per cent of the total, and that these were merely "marked for further study and were not necessarily violations of the law, it seems that the truthfulness of radio advertising is quite high. During the same fiscal year the Commission examined 1,733 editions of representative newspapers with general circulation, 1,309 magazines, including farm and trade journals, 10 foreign language publications, in which 18,256 advertisements were noted which contained representations that warranted further inquiry into their factual basis. Of 102 mail order concerns, catalogues and circulars were examined, and 238 advertisements were marked for further study.

Drug Prices

THE fact that the prices of drugs and cosmetics have risen only a very small percentage in the face of sharply higher prices for most of the things which we buy, is something that should be strongly brought to the attention of the entire population of this country. Too many times does the ordinary individual complain about the high prices which he must pay for drugs for people who need them. And this criticism of the prices of many drug products also extends to doctors and other professional men who should know better than to criticize the prices at which drug products are sold. Doctors and others associated closely with drug products must know that the manufacturers of drug products are only too anxious to lower prices as quickly as they can so as to extend the use of their products. We do not believe that manufacturers can do any better than they are doing along the lines of bringing drugs and pharmaceuticals to people at lower prices than are now prevailing. Of course, if you prefer you can have state, socialized, or some other form of medicine which will start with compulsory health insurance. Then eventually the fare will rise just as it has on the New York subways which were taken over by the people, under Mayor La Guardia. Let's not fool ourselves, competition tends to lower prices, but state ownership does not. Eventually, costs rise under state ownership and the taxation to raise the money to support the program must be increased. Politicians might resist the tide of increased costs for a while, but eventually it will engulf them, and then the public will suffer.

P. M.'s and the F. T. C.

THE action taken by the Federal Trade Commission in the Philco case is interpreted generally as being aimed at the practice of giving P.M.'s or push money to retail clerks. However, there will probably be no decision in this case since Philco quit the scheme as soon as the action was taken by the FTC. The plan was called the Sell-'N-Win campaign, and it had been pushing sales of Philco radios and appliances to new highs. Under the plan salesmen were awarded points for their sales of Philco products, and these points entitled them to prizes selected from a catalog. The salesmen also accumulated coupons entitling them to chances on automobiles and substantial cash awards. The FTC argued that these inducements to salesmen in retail stores constituted an unfair method of competition; an unfair and deceptive act and practice in violation of Section 5 of the FTC Act as amended by the Wheeler-Lea Act. In other words the FTC claimed that the Philco method stifled and suppressed competition because salesmen were induced to sell Philco products in preference to and to the exclusion of competing brands; the purchasing public was deceived; the consumer looked upon the salesman as an expert and impartial adviser, while actually the salesman was subsidized to sell a particular brand. In this case it appeared that the FTC was out to reverse a decision on this point handed down by the Seventh Circuit Court of Appeals in 1921 before the passage of the Wheeler-Lea Act. This decision held push money legal if paid to clerks with the knowledge and approval of employers. However, the FTC feels that this will no longer apply since the Wheeler-Lea Act has brought deception of the public into the picture, and the former decision was merely on the basis of unfair competition among manufacturers. Everyone is wondering whether the FTC is going to take similar action against push money in the cosmetic industry, and will this indicate a similar action against demonstrators.

Tariff Changes January 1st

JUST what the effect of the new tariff agreement which goes into effect on January 1, will be is difficult to say at this time. All that we can do is to give the changes on the tariffs of products which go into this industry. Where the word "Bound" appears, the nations have agreed not to increase existing rates during the next three years.

Item	Old Rate	New Rate
Cottonseed Oil (lb.)	3 cents	Bound
Sugar		
Cuba (96 degree) (lb.)	0.75 cent	0.50 cent
General Rate (lb.)	0.9375 cent	0.6875 cent
Coconut Oil (lb.)	2 cents	1 cent
Oils, Essential		
Orange Oil	25 per cent	12½ per cent
Eucalyptus Oil	15 per cent	7½ per cent
Clove Oil	12½ per cent	7½ per cent
Peppermint Oil (Menthol type)	25 per cent	12½ per cent
Peppermint Oil (Flavor type)	25 per cent	Bound
Patchouli Oil (Flavor type)	25 per cent	Bound
Patchouli Oil	12½ per cent	Bound
Camphor Oil	12½ per cent	7½ per cent
Sandalwood Oil	12½ per cent	10 per cent
Pine-needle Oil	12½ per cent	7½ per cent
Paper and Paperboard, Cut, Stamped or Embossed	30 per cent	15 per cent
Paraffin Wax (lb.)	1 cent	½ cent
Petroleum Oils, unfinished (gal.)	½ cent	¼ cent
Talc, ground, (value under $14 per ton)	17½ per cent	10 per cent
China Clay or Kaolin (ton)	$1.75	$1.25
Perfume Containers, hand-made	75 per cent	50 per cent on bottles; 37½ per cent on jars
X-Ray Apparatus	17½ per cent	10 per cent
Chemicals, Aromatic	22½ or 45 per cent	15 or 30 per cent
Perfume Materials, Mixtures (lb.)	40 cents plus 30 per cent	30 cents plus 20 per cent
Perfumery, Cologne, Toilet Preparations (lb.)	40 cents plus 37½ per cent	30 cents plus 20 per cent
Without Alcohol	37½ per cent	20 per cent
Glycerin		
Crude (lb.)	8-10 cents	4-10 cents
Refined	1 3/15 cents	1 cent
Menthol (lb.)	50 cents	40 cents

Growth of Scientific Sections

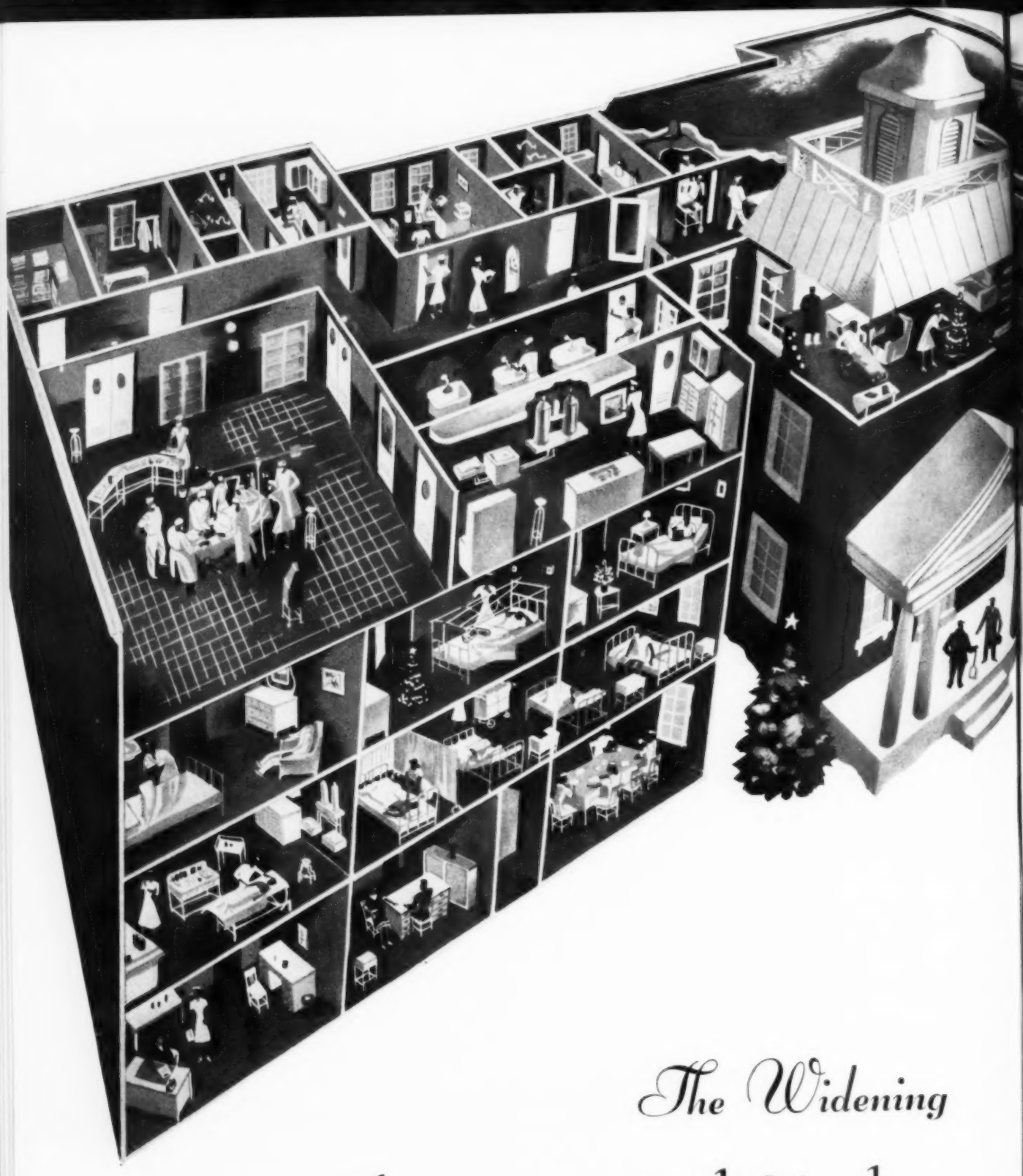
THE scientific meetings of the various associations of this industry have developed to a remarkable degree in recent years. Time was when the American Drug Manufacturers Association was the only group in the industry which had a real scientific section which held interesting and profitable meetings. Soon after, the American Pharmaceutical Manufacturers Association followed suit, and the scientific sections of these associations worked together in the Joint Contact Committee and in other ways for the general good of the industry, the medical, dental and pharmacy professions, and the people of this country and of the entire world. At a later date a strenuous effort was made to develop a scientific section in the Proprietary Association, and as the years passed, the meetings of this section became something of great benefit. Still later the Toilet Goods Association realized that a similar need had developed in their ranks as the scientific side of cosmetics and their ingredients became increasingly important. Now twice a year this association holds meetings of the scientific section at which the latest developments from the scientific aspect are presented and fully discussed. The soundness of all branches of this industry from the scientific angle today, as compared with a comparatively short number of years ago is something which should be looked upon with pride, and which should stir the manufacturers and scientists in the industry to still greater effort.

"UP IN CENTRAL PARK"

Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., and Joseph Baird Magnus, vice president, are shown above at a Maypole party in Central Park, New York, at the turn of the century. Percy is the boy at right in the front row, "Joe," about three years old then, is the appealing kid in the middle foreground, and Elisabeth G. Magnus, who until her death last month was secretary of the firm, is Queen of the May. At the time of this party the Magnus family lived on Central Park West. Robert B. Magnus, the third member of the well-known trio of essential oil brothers, was not as yet born when this picture was taken.

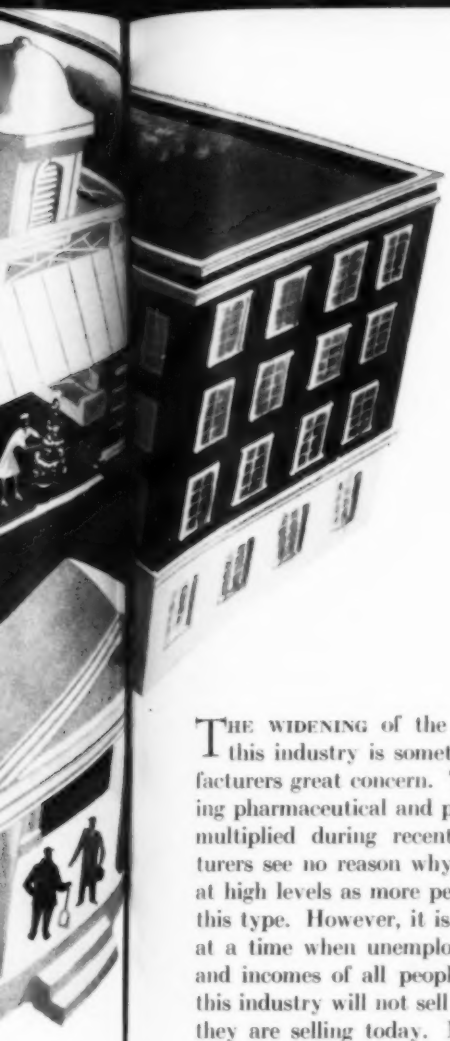
A.Ph.A. and Proprietary Association

THE controversy between the American Pharmaceutical Association and the Proprietary Association continued to grow more bitter as Dr. Robert P. Fischelis, Secretary of the A. Ph. A., published a strong editorial in the Practical Pharmacy Edition of the A. Ph. A. Journal last month. He complained that the members of the Proprietary Association were confusing members of state legislatures regarding proposals for "restrictive legislation in the interest of public health, "in that the Proprietary Association failed to discuss its problems in the open forum of the A. Ph. A. meeting held last August, and in that the association opened the subject to public discussion outside the industry. "We regret the necessity for a public discussion of this matter, even in a professional manner," said Dr. Fischelis, "However, it has reached the point where we should have a showdown and name the producers of pharmaceuticals who deliberately plan to by-pass pharmacy as the properly constituted legal outlet for drug products and medicinal preparations." Dr. Fischelis spoke of the fact that many men in the proprietary business are pharmacists, and that they have contributed to the support of colleges of pharmacy, stating that it is difficult to believe that legislative representatives of the Proprietary Association are carrying out the wishes of these men. "One cannot conceive of the existence of individuals in this industry who would be so short-sighted as to support the development of colleges of pharmacy and the recruitment of students for these colleges, only to turn them out as registered pharmacists limited in their responsibility to the compounding of prescriptions and the sale of such highly toxic drugs as require unusual safeguards, which even the members of the Proprietary Association admit are dangerous to the public. We prefer to believe that some enthusiastic legislative representative or paid organizer has over-stepped the mark and needs to be called to order by the Proprietary Association."



The Widening

Pharmaceutical Market



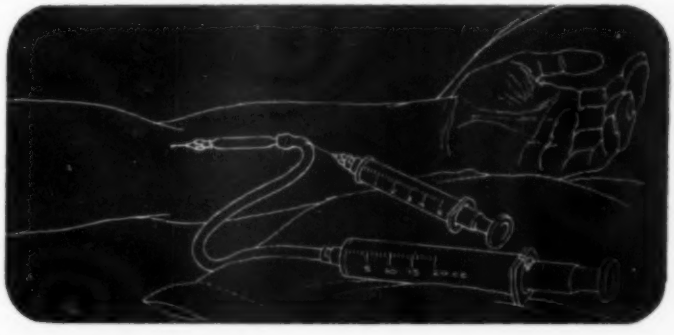
THE WIDENING of the market for the products of this industry is something which is causing manufacturers great concern. The sales volume of the leading pharmaceutical and proprietary manufacturers has multiplied during recent years and these manufacturers see no reason why volume should not continue at high levels as more people make use of products of this type. However, it is only natural to suppose that at a time when unemployment "rears its ugly head" and incomes of all people are lower, the products of this industry will not sell in the same volume in which they are selling today. Many manufacturers venture the opinion that at such a time costs and selling prices will be lower and, while sales volume in dollars might be lower, the actual amount of goods produced and sold will not decline by a very large percentage. In fact, many manufacturers express the opinion that they desire deflation of values of everything so that the average person will be able to buy the necessary share of all types of things that he needs or desires. Such a condition, they feel, will not only maintain the volume of the products of this industry which are sold, but might even increase it.

Be this as it may, a general decline in the value of all things is going to present a very serious problem for this nation due to the huge national debt. For if the national income drops sharply due to a slackening in business and lower prices as the result of competition during such a period, the percentage of taxation will have to be increased to the point at which incentive to work and produce will be sharply impaired. Therefore, it is essential that prices of most things do not drop too sharply. It is desirable that the prices of food, clothing, and many other essentials decline considerably, as they are very much over-priced, even at today's economic levels, but there are many other things which are not so much over-priced. One can wish that prices of everything were lower, but it is doubtful that under such circumstances the people of the nation would be any better off, or even as well off as they would be under a higher price structure.

Meanwhile manufacturers in this industry are expanding their facilities so that they will be able easily to supply the demand which exists today, and even leaving room for some additional volume which they hope might materialize. These new plants and additions are costing dearly because of the extremely high costs of buildings and equipment. A curtailment in volume would result in these new plants and additions becoming serious financial burdens. During the present period, however, manufacturers are going ahead. And because of the tax picture being what it is, these companies are not able to obtain the money for these expansions from earnings. Therefore, they are having to obtain outside financial help through preferred stock or loans of some kind. These loans will constantly make the companies aware of the costs of these expansions.

However, not all of these expansions are being made simply to increase the output of the ordinary goods of the companies. Some of them are forced upon manufacturers through new developments, particularly in the field of antibiotics. The manufacture of antibiotics is composed of processes which formerly were entirely foreign to manufacturers of pharmaceuticals. It calls for special plants, special equipment, and specially trained employees. Pharmaceutical manufacturers previously, with very few exceptions, did practically no manufacturing of particular chemicals or similar products. They were, for the most part, content to buy these things from the chemical manufacturers, limiting their own activities to mixing, tableting, weighing, and similar operations, including the all-important packaging. However, the outstanding pharmaceutical manufacturers are entering this field on their own, although there will still be a very large num-

The illustrations on these pages have been reproduced from the 1947 Special Christmas Edition of "What's New" published by Abbott Laboratories.



ber of these manufacturers who will obtain their supplies from the manufacturers who do not market the antibiotics directly.

Since prices have become, and will continue to be in an increasing degree, a major factor in the marketing of these antibiotics, these pharmaceutical manufacturers probably feel that they will be in a better competitive position with their own production. Then again, there is no telling how far the development of antibiotics is going. Penicillin, of course is very widely used, and the use of streptomycin is increasing. However, there are innumerable other antibiotics upon which work is being done which have not as yet seen the light of day. The time is already here when individual pharmaceutical manufacturers are searching for new and better antibiotics in the hope that they will have them exclusively.

The pharmaceutical branch of this industry has for many years been keenly competitive as to prices. On numerous occasions prices of many pharmaceuticals have been cut below cost. It is for this reason that the manufacturers are always extremely anxious to obtain exclusive items, or specialties. Such items, if properly promoted, can always be sold at a fair profit. Also the companies which discover them are certain of an excellent position with the medical profession until such time as a better item replaces them. And when a specialty is replaced by an improved product, the product which is replaced can be lowered in price since the original cost of developing the product has at that time been paid for.

It is this search for specialties which is back of all the research institutes which have been set up by large pharmaceutical manufacturers within recent years. And it is this same search for specialties that is, in the main, responsible for great strides which have been made in recent years and which are still being made. The pharmaceutical industry is now very closely allied with the medical profession in the development of new products. One main reason for this is that extensive clinical work is necessary before a new product can be marketed under the new drug provisions of the Federal Food, Drug, and Cosmetic Act. One outstanding effect of this law, enacted in 1938, has been this close relationship between the doctors and the pharmaceutical manufacturers. And this relationship has resulted in the development of a sharply increased development of efficacious products than was ever discovered in a like period before.

As a result of these developments, the pharmaceutical manufacturing branch of this industry has, within recent years, had an extremely rapid turnover in the products which are demanded by the medical profession and the public. Sulfa drugs and penicillin replaced biologicals to a large extent, but new biologics came into the picture to perform in instances and ways that no biologics had ever acted before. Atabrine replaced quinine to a very high degree, but now quinine is coming back into the picture as supplies cut off by the war are again making their appearance. Synthetic narcotics are appearing upon the field to an increasing degree. A whole new field has been opened up by the discovery of drugs for the relief of allergic conditions such as asthma, hay fever, and like conditions.

Over the past ten or fifteen years the number of specific drugs for various diseases has expanded widely and at a steadily increasing rate. Back in the twenties and early thirties there were only about six specifics known to the medical profession. There are many times that number of specifics now used by the medical profession. This sharp increase in the number of drugs which are specific in their action against various diseases has caused doctors to turn to drugs for treatment of all sorts of conditions. Some years back the medical profession, by and large, had very little use for drugs in effecting cures. The great things then were diet, lots of sunshine and fresh air, and rest. Many types of infection could be fought in no other way. Now with the sulfa drugs and antibiotics, these infections can be immediately brought under control.

The great developments in the field of vitamin therapy which has taken place over the past ten or fifteen years is just another example of what is taking place. Also the amino acids are at last finding a real and extensive place in the treatment of many diseases and conditions. These products can be expected to increase further the use of pharmaceutical preparations by the physicians and public generally. Under these circumstances it can be seen why the pharmaceutical manufacturers are expanding their facilities. They are doubtless of the firm opinion generally that the use of their preparations will continue to expand over the years no matter whether or not general business conditions rise or fall.

DISCOLORATION PROBLEM: In compounding a wave concentrate and hair lacquer we are using triethanolamine and borax. Apparently both of these ingredients discolor the products in about nine days. We also find that our hair lacquer will become sticky after four and five months. We would greatly appreciate receiving your suggestions how to overcome the discoloration and stickiness. Chicago.

Since you do not give me any information concerning formulation, I can only hazard a guess as to your trouble. It is recognized that triethanolamine soaps occasionally may cause creams to become slightly discolored after standing some time. The amount of discoloration is largely dependent upon the nature of the ingredients used in formulation. However, soaps made with isopropanolamine show much less discoloration than those made with other amines. Mixed isopropanolamine can usually be substituted for triethanolamine in a cosmetic cream emulsion or you might try using some other type of emulsifier like glyceryl monostearate or diglycolstearate. With regard to your hair lacquer it is possible that the changes are due either to the evaporation of the solvent or to oxidative changes in the constituents. This is perhaps attributable to faulty closures.

HARRIS AND EWING

Home of the American Pharmaceutical Association, Washington, D. C.

Merging Industry Interests

THE RETAILING wholesaling, and manufacturing of the products in this industry is still split into many divisions, each of which continues to have strong selfish purposes. For the most part these interests are offset by the need of cooperation between the various divisions of the entire industry, but, on occasions, they are not. In the manufacturing branches of the industry we have two different associations representing the pharmaceutical, or so-called ethical manufacturers of drug products. These two associations differ in the set-up of their groups and in their methods of operation. However, their aims and purposes are probably as identical as any two groups in the entire industry. Next we have the Proprietary Association which represents the manufacturers of proprietary drug preparations, or of preparations which are sold strictly by brand names and which are advertised directly to the public. The other manufacturing association, the Toilet Goods Association, does not have anything of consequence in common with the drug manufacturing associations, and neither does it have any views of consequence at variance with them.

In the wholesale division we have two main associations which operate in entirely different ways. First we have the National Wholesale Druggists Association which consists of so-called service wholesalers. These wholesalers are operated for the profit of the owners of them and not for any retail outlets. They carry a full line and render to the retailers whom they serve

a complete service. The Federal Wholesale Druggists Association, on the other hand, consists mainly of so-called cooperative or mutual wholesale drug houses. Many of these are owned completely by groups of retail druggists who own the stock of these cooperative wholesalers. Some are only partly owned by retail druggists, and some are establishments which return to their customers a part of their earnings. Also among the membership of the Federal Wholesale Druggists Association as associate members are wholesalers which are not cooperative in any sense.

From the wholesale associations we go to the retail associations. The national retail associations are the American Pharmaceutical Association and the National Association of Retail Druggists. The former is concerned largely with the professional side of pharmacy, although it is difficult not to have the commercial aspects of pharmacy from creeping into the picture. The National Association of Retail Druggists is concerned solely with the commercial aspects of pharmacy.

It is only natural that the retail organizations should want everything done in the industry from top to bottom to react to the benefit of the retail pharmacist. It is to be expected that they should want all manner of products of the industry to clear through the retail drug store manned by graduate pharmacists. They are willing to admit that in certain instances, as when drug stores are too far apart as in some sections of the country, that some preparations might be sold through other types of outlets. But in the main they want nothing for the relief, mitigation, or cure of disease to reach the public in any other way than through the retail pharmacist. Naturally, hospital pharmacies are included in the approved list of the retail organizations. Furthermore, nothing can be done about doctors who desire to buy direct from manufacturers or wholesalers and dispense or apply their own medicaments.

The wholesale associations have an interest quite different than either the manufacturers associations or the retailers associations. They have a divided loyalty to the manufacturers, on the one hand, and the retailers on the other, as well as their own self-interest. The wholesalers must work to keep the business of the retailers healthy and profitable. Therefore, they are constantly working on the manufacturers to try and gain additional concessions for the retailers. Also the wholesalers are constantly trying to obtain additional concessions for themselves. Another aspect of their activity is in trying to get to pass through their hands as large a percentage as possible of the goods that find their way to the ultimate consumer through the retail drug store. In this they are opposed to some extent by those manufacturers who sell direct to chain store orgainzations, large retail outlets, hospitals, doctors, and dentists. The very large majority of manufacturers, however, will not sell their goods to wholesalers who are looked upon as price-cutters or out and out discount houses. The National Wholesale Druggists Association has been very active in getting manufacturers to fair trade their price at wholesale levels so that price-cutting by wholesalers will be eliminated as far as possible. The wholesale associations have likewise been extremely active in fighting for, and defending fair trade laws against attacks for the reason that these laws are of distinct benefit to the retail druggists who are their customers. As the fair trade laws were enacted to protect the independent retailers against the large retail organizations who drew business away from the independent retailers by cutting prices on loss-leaders, it is natural that the wholesale druggists who depend upon these independent retail outlets for their livelihood should take this stand. But the wholesalers also take this stand because of the application of the fair trade laws at wholesale levels, as well for the reason that the manufacturers who pay them in discounts for the services which they perform, also want these laws.

In addition to the retail associations mentioned there are also associations of chain drug operators, such as the National Association of Chain Drug Stores, Associated Chain Drug Stores, and Affiliated Chain Drug Stores. These associations are interested in protecting the rights of chain drug store operators and in obtaining for them all the benefits that can be secured. They are naturally interested in securing wholesale discounts wherever possible, and some of these associations are interested in promoting brands that are manufactured under private label for distribution by all of their members.

There is one other group that might be mentioned in the wholesale division of the industry and that is the Druggists Supply Corporation. This is an organization of independent service wholesalers who are also members of the National Wholesale Druggists Association. This organization is interested in obtaining for the wholesaler members of its organization all the benefits from manufacturers which can be secured; Therefore, this group is strictly commercial in nature.

The complexity of the picture in drug manufacture and distribution is clearly indicated from this outline of the associations and their constituencies and aims. This is why quite bitter controversies can arise within this industry when the aims of two or more groups are at variance. At the moment a controversy is under way between the American Pharmaceutical Association—interested mainly in the professional phase of pharmacy, but also interested to a large extent in the commercial phase of pharmacy—and the Proprietary Association—representing manufacturers of medicinal preparations which are sold by brand name and advertised directly and extensively to the public.

The associations which represent the manufacturers of pharmaceutical preparations, or so-called ethical preparations have little or no controversy in this regard for the reason that they depend mainly upon the physician for the promotion of their goods and this means that the retail pharmacist, the hospitals, physi-

(*Continued on page 847*)

Physiological and Chemical Aspects in the Flavoring of Medicinal Preparations

By I. W. GROTE and PEGGY WALKER*

A NUMBER of papers on the flavoring of pharmaceutical products are found in the literature, but few of them approach the problem of flavoring by analyzing it in the light of the basic concepts of taste perception and flavoring. Such a knowledge would dispense with the hit or miss procedure usually followed in the flavoring of a pharmaceutical product and would lead directly to the selection of the flavors most suited to the particular material.

There are a number of complex mechanisms involved in taste perception. Some, seldom thought of as pertinent to taste, are foremost in factors impressing the patient who takes the medicine. Temperature and physical properties such as the smooth, rough, lumpy, gritty, oily, viscous or limpid quality of the material are intimately associated with taste, but will not be discussed here. Chemical properties, however, are often confused with taste, for pungent, acrid, astringent, irritating, cooling or soothing qualities modify the taste quite noticeably, as we know from soft drinks, chili, etc. And even more confused with taste is smell, which colors and modifies all that we eat or drink and by which we judge most of our preferences and dislikes. Finally, there is the true taste, which by usage is divided into four classes; salt, sour, sweet and bitter. Two others are sometimes added, alkaline and metallic, but these are generally regarded as blends of sensations.

Gross chemical perception is among the most primitive of senses and is experienced by the lowest of animals. In man, the special sense called the common chemical sense is almost restricted to areas of mucous membrane in which the receptors are free nerve endings. Here there is no complicated end organ corresponding to the taste buds or to the olfactory cells and the sensation is really one of "feeling." The response to such stimuli as ammonia and acid fumes, generally is a physiological response which serves mechanically to remove the irritants from contact with the membrane, such as by weeping, coughing or sneezing.

True taste sensations are brought about by solutions of sapid or savory substances coming into contact with the taste buds of the mouth. Truly insoluble substances have no taste. The taste buds, which are clusters of taste sensitive cells, number some 9,000 in the adult and are found mainly on the back surface of the tongue, on the soft palate and on the epiglottis and the beginning of the gullet with a few at the tip and middle of the tongue. In children, they are far more numerous than in the adult and are more widely distributed on the inside of the cheek and at the tip of the tongue.

The taste cells are elongated and each ends in a minute hair-like process called the gustatory hair, which projects through a minute pore in the surface of the taste bud into the mouth cavity. Direct stimulation takes place on the hairs and the impulse passes through the gustatory cells to the nerve fibers and thence to the brain. It is likely that each taste bud reacts only to one taste, such as sweet, and does not react to sour, bitter or saline. It is impossible to differentiate most of the buds by appearance, but only by their response to different taste stimulants. In general, however, we find the receptors to sweet on the front tip of the tongue, salt on the front sides, sour on the middle sides and bitter on the back and sides of the tongue. Thus we do not sip beer, but do wine; while candy is licked with the tip of the tongue by the child.

The sense of olfaction, or detection of odor, is so closely associated with that of taste they are frequently confused, and many olfactory experiences are referred to as tastes. In a few cases, such as ginger, the chemical sense of stinging also comes into play and the substance is both tasted, felt and smelt.

The olfactory mechanism is in many ways similar

*Chattanooga Medicine Co.
Read before Scientific Section, Proprietary Association, Dec. 5.

COURTESY OF CHATTANOOGA MEDICINE CO.

to the taste mechanism. The olfactory epithelium, located in a narrow niche just under the roof of the nose, and covering 500 square millimeters area, contains all the olfactory receptors. The cells are elongated and arranged perpendicular to the plane of the surface. The cell body is contained within the region of the epithelium, which is the outside layer of the mucous membrane or skin. The terminations of the dendrites or branched extensions of the olfactory cells, namely the olfactory hairs, are covered only by a layer of fluid. This fluid, secreted by the Bowman glands, is of a watery nature, but it is thought that the hairs are of a lipoidal nature. Hence, to be truly odorous a substance must be both water and lipoid soluble.

It has been observed that the pigmentation of the olfactory area is related to ability to smell. In "smell sensitive" animals such as the cat, dog, fox, etc., the area is very strongly pigmented, whereas in man the area is a very light brown or yellow and in true albino animals and man, the area is colorless and the olfactory ability is consistently depressed or lacking entirely. Usually pigmentation is less marked in young animals and increases as the animal ages. The young baby has a poor sense of smell but a keen sense of taste.

Normal breathing will produce olfaction in only a small fraction of the dilution in which the same substance may be detected by a "sniff," which brings the molecules into better contact with the olfactory area. On the other hand, holding of the breath will completely prevent the sensation of olfaction, although the nose be filled with odor-laden air. The old practice of holding one's nose to take medicine was very sound.

It has been found that the sense of taste is far less sensitive and less complex than the sense of smell. Although an infinite number of taste and smell sensations exist, the combinations which we are able to relish is somewhat limited. In general we do not like new tastes and have to learn to like strange combinations. Generally, the tastes which we enjoy are rather dilute, with exceptions of candy, pickles and salty nuts and meats. Strongly bitter tastes are liked by few persons. The senses of taste are quickly fatigued. For this reason, we eat several foods together, to gain the maximum enjoyment of each taste, and to give each taste and smell a chance to rest.

At least two of the four taste stimuli show relationships between chemical constitution and taste. A sour taste is produced by acids and acid salts, whose common constituent is the hydrogen ion. It is found in them wherever the solubility is sufficient and the pH is sufficiently low. The salt taste, as its name indicates, is a characteristic of the inorganic chlorides, sulfates, bromides, iodides, and nitrates, though some salts are bitter (the ammonium, magnesium and calcium salts) and a few are sweet (lead and beryllium salts.)

No such generalizations may be made with the bitter

or sweet tastes, except to say that they are chiefly associated with organic compounds and that often the most superficial change of structure may transform a sweet compound into a bitter one or vice versa. Oertly and Meyers proposed the theory of glucophores and auxoglucs. Glucophores are groups which make a given compound a potential taste stuff and auxoglucs are those which, combined with the glucophores, produce a sweet taste. Knowledge of the effects of certain groups has been utilized to produce chemicals of the same physiological activity while the taste is improved: for example, quinine ethyl carbonate, ferrous glycinate, etc.

Susceptibility to fatigue, which is characteristic of the four types of taste receptors is likewise found in the sense of smell. Thus, on eating candy we dull all preception of sweet which amounts to ¼ of our range of taste perception. On sniffing intensely of a rose, we become adapted to this particular odor and are no longer able to smell it or some related odors. We may still, however, smell cucumbers, oranges or coffee and many others. The rate of such adaptation varies for different odors. On constant exposure we lose ability to smell oil of orange or lemon in about 3 minutes and coumarin cannot be smelt longer than from 1¾ to 2-1/3 minutes. Olfactory adaptation, or loss of sensation to the odor, commences to develop from the moment that the odor is first smelt, the threshold rising gradually until complete insensitivity to that particular odor is reached. Recovery from such adaptation takes place in about 1-3 minutes.

Attempts at classifying odors have not been rewarded by as general acceptance as have the classes ascribed to taste. Smells are so colored by experience that it is very hard to express them except by comparison. A French perfumer, Piesse, likened odors to notes in music and advanced the theory of chords of odors, notes with certain frequencies being harmonious together, while combinations of other notes produce discord or a repulsive odor. Huysman, in "Against the Grain" carried out the idea in what was called a "Mouth Organ" with which Des Essientes played rare and enchanting music upon his inner senses by the use of combinations of liquors, cordials, wines and brandies.

If two scents are of about equal strength, a blend of the two is smelt or both may be identified, but if one is considerably stronger than the other, it alone, as a rule, is smelt. On the other hand, certain pairs of odors in appropriate relative concentrations are antagonistic and when sniffed together, both are diminished, such as combinations of iodoform and balsam of Peru, musk and bitter almonds, and ammonia and acetic acid. This lends strength to the theory of frequencies of vibrations either in the receptors or in the vapor entering the nose. A recent adoption of this odor neutralization is seen in the various household wick deodorants now advertised.

Thus, in flavoring medicinals, we have two prime considerations in each instance; that is to say, taste and odor. These two considerations give rise to four possibilities, namely; bland taste and odor, disagreeable taste with no odor, bland taste and strong odor, or the most unfortunate case of having both a bad taste and a bad odor.

In the bland preparation, the problem is half solved, yet there are important points to remember. Color association should be accurate since a raspberry flavor color green would not be acceptable. Likewise, raspberry flavor without an acid taste and without a sweet component would not be readily recognized as raspberry and could hardly be described as pleasant, but rather as perfume-like. Raspberry flavor really means, to an ordinary person, a red raspberry color, the characteristic fruity, raspberry odor and an acid and sweet taste. Other suitable flavors for a bland preparation are lemon, orange peel, orange flowers, anise, fennel, tolu and cherry.

A medicine with a bad taste and no odor may generally be described as a bitter, acrid, briny or metallic taste. The tastes may be transient or may cling for a considerable length of time as in the case of quinine. Strong tastes tend to obscure one another and certain degrees of bitterness, sourness or saltiness may be effectively matched by the appropriate amount of sweetening agent, as is well known. Saccharin should not be used to sweeten bad tastes of long duration, as its aftertaste is anything but pleasant. Glycyrrhiza, on the other hand, contains the glycoside, glycyrrhizin, which has a prolonged sweetening effect. Ward and coworkers found sugar to be a much better masking agent for bitter than saccharin or dulcin and dulcin is about 5 times as effective as saccharin.

Masking may also be done by physical neutralization which is very little understood at the present time, but a few effective examples are to be found. M. J. Shulte found that the strong, disagreeable taste of sodium salicylate and sodium bicarbonate is removed by the correct amount of sodium pyrophosphate. Jaleski reported that disodium phosphate will reduce the unpleasant taste of the alkali salts of diethyl barbituric acid.

Unpleasant tastes may be blended into something quite pleasant as is found in the case of the familiar cocoa. Ground cocoa alone is sharp, bitter and uninviting. With the toning down effect of the cocoa butter, as in bitter chocolate, there is a more interesting taste, but it is still much too bitter to be enjoyed. Upon adding the taste of sweet, with sugar, the aromatic effect of vanilla, and the colloidal and diluting effect of milk, we arrive at a delectable confection, milk chocolate. While probably not as much can be done for the bitter taste of quinine, with closer study, many other pharmaceuticals can be improved following the same line of attack. The emollient and soothing effect of a small amount of nutritive or inert fat or oil, the colloidal effect of casein or some related material and the judicial use of the proper aromatics may sometimes turn a very nauseous dose into a remarkably acceptable product.

If such an attack is not practicable, use may perhaps

(Continued on page 848)

REXALL REPACKAGING

Shown above are the new packages which have been adopted for Silque and for the Cara Nome line of toiletries.

THE REXALL Drug Company's repackaging program—probably the largest undertaking of its kind ever attempted in the drug industry—is progressing rapidly. New package designs for more than a thousand of the company's products have been completed since the program was begun in 1943.

Justin W. Dart, president of Rexall, announced four years ago that the company would challenge the appearance of each of its nearly 5,000 items with the objective of making them outstanding in sales appeal and functional efficiency. Subsequently this effort has become an important part of Rexall's nation-wide development program.

The old and new designs for the Rexall line are shown at the lower left with the old packages at the left. To the right is a picture showing the old and new Rexall Firstaid line. The new packages feature the oval Rexall logotype. The picture directly below shows the old and new Rexall Theatrical Cold Cream package — the old at the left.

Along with modern store identification, national advertising in magazines and radio, changes in corporate and trade names, the new package program was planned to not only create additional sales power but to tie in with the word "Rexall."

"The object of redesigning our packages is not only to bring them up to date but, more specifically, to feature the word "Rexall," said Thomas H. Lane, vice president in charge of sales promotion and advertising. "In this way we can mesh package appeal and point of sales recognition with our new advertising program featuring the Rexall name. This change was extended even to the firm name United Drug Company which became, through step-by-step evolution, the Rexall Drug Company."

The company-wide package redesign program was placed under the guidance of Roland L. Baum, Rexall's art director who instituted an item-by-item survey in consultation with merchandising and production representatives.

In the photograph immediately below the new Denturex packages, in the foreground, are contrasted with the old which are shown in the background. In the picture at the bottom of the page the new and old package designs for the Rexall Puretest line are shown. The new are easily identified by the oval Rexall logotype.

Size and scope of the program demanded the services of many top designers. Mr. Baum made a thorough review of the package design field, selecting both "name" designers and promising newcomers for the numerous and varied projects.

The first portion of the job to be undertaken was the Rexall, Puretest and Firstaid lines of the company, some 700 items altogether. Now, all those have been redesigned under one name, Rexall, and have similar structural pattern with a slight change in color emphasis. Puretest and Firstaid names have been retained but dominating them is the script Rexall in the blue oval which is the company logotype.

Like almost all other repackaging programs, Rexall's met with many obstacles after the war ended. Many of the new designs which have been completed and approved have not gone into production because glass plants have devoted their capacities to building up stocks of standard containers.

The program brought about some realignment of the various products gathered under numerous trade names, and reshuffled some of these products among the various merchandising departments. The name Klenzo, for example, has been limited to general bathroom toiletries such as toothpaste, tooth brushes, shaving cream, razor blades, shampoo, soap, antiseptic, styptic pencils and pumice stone. These items, formerly unrelated in design, have now been grouped together under a uniform pattern.

New designs have been prepared for the company's well-established Cara Nome cosmetics line. The package dress for this line had remained virtually unchanged for 25 years, and because it was so well established, the Cara Nome flower basket trade-mark was retained but enhanced and improved. New bottles, caps and labels were designed. The background color, formerly a soft yellow, has been changed to a peach-like complexion tint and the logotype has been modernized.

For the first time Rexall's complete line of food and fountain products have been grouped together under the Gales name. Each food product bears the distinguishing "Taste Tested in Gales Kitchen" notation to further identify the Gales name with these foods and fountain products.

Among other Rexall lines which have been redesigned are: Elkay's household items; Silque line of lotions, hair tonic, etc.; Gypsy creams; Lavender bath products and shaving needs; Ilasol, Violet cerate and camphor ice; and Tiny Tot and Stork baby products.

Additional products for which packages have been improved include: Mi 31 oral hygiene products, Aga-Rex and other bulk laxatives, Cherrosote, Rexillana, Bisma Rex and Bisma Rex Mates, Rex Mentho, Rex Salvine, Quick Rub, Rexall theatrical cold cream, Alco Rex, Dram perfume bottle and Rex Seltzer, Rex Rub, Aspiroids, Ivy-Check lotion, Skidoo lotion, Melo Rex cough syrup, Eyelo and Rex Optex.

PHOTOGRAPHS FROM NEW YORK BOTANICAL GARDEN AND BRITISH COMBINE

ALGINATES in DRUGS and COSMETICS

By M. A. LESSER

IN THESE days of synthetics, it is interesting to see how the alginates, which are natural products, have assumed important roles as valuable industrial raw materials. Sodium alginate or algin, the most important of these compounds, is now being widely used as a thickening agent, emulsion stabilizer, and gelling medium in the manufacture of drugs and cosmetics. With well established uses in dentistry, the alginates also offer interesting possibilities in the field of medicine.

The story of the alginates really begins with E. C. C. Stanford's efforts to improve the yield of iodine from seaweed growing along the Scottish coast. While working on this problem, the English chemist became interested in seaweed as a source of useful by-products. In 1883, he extracted an acid substance with unusual gelling properties. He called it alginic acid after the Latin word, alga, meaning seaweed.[1,2]

Although progress was slow at first, the uses of the alginates have expanded into many industries during recent years. Aside from their use in the drug and cosmetic industry, these materials are also employed in the food industry as stabilizing agents for ice cream and milk mixtures, for thickening jellies, making confectionery and preparing coatings for cheese, meat and other food products. They are also used in textile sizings, finishes and printing compositions. The properties of the alginates are also utilized for creaming latex, for treating paper, in the manufacture of cold water paints, agricultural sprays, boiler compounds, welding rods and in the production of many other items.[3,4] In many of these applications, sodium alginate competes with vegetable gums, like tragacanth and acacia. A decided advantage of the alginate is its uniformity so that consistent, dependable results are obtained.

Another advantage of the alginates is an abundant supply of raw materials for their manufacture. The hydrophylic colloidal material is extracted from various species of marine kelp. In suitable varieties, the alginic acid content varies between 20 to 40 per cent of the dried seaweed.[1] On the European and American coasts of the Atlantic Ocean, two species, *Taminaria digitata* and *Lamia aria saccharina*, are harvested as raw materials, while on the Pacific coast of the United States another variety, *Macrocystis pyrifera*, is gathered for the same purpose.[2]

Although Stanford's original process has been modified and improved in newer methods, the modern extraction principles differ little from those laid down by the English chemist.[3] In his review of this method, Moncruff[1] says that the preparation of alginic acid is essentially as follows: The seaweed is treated with dilute sodium carbonate solution for 24 hours in the cold. This transforms it into a gelatinous mass which is filtered. The filtrate contains sodium alginate and, on addition of a strong acid, alginic acid is precipitated. The modern modifications take advantage of newer technics and increased knowledge of colloidal chemistry to produce better, purer and more uniform alginates.

Such improvements, plus continued research, help to explain the rapid growth of the alginates as industrial raw materials. According to Mantell,[2] it is estimated that production in this country is well over 2,000,000 pounds per year, with a money value exceeding one and one-half million dollars.

The term alginates includes alginic acid and its salts. Chemically speaking, alginic acid is a polymer of a sugar acid, namely, d-mannuronic acid. As already indicated, sodium alginate is the most important of these compounds. However, alginic acid ammonuim alginate, calcium alginate and triethanolamine alginate are also available commercially for certain specific uses. Generally speaking, the alkali metal alginates are water-soluble, while those of the heavy metals are not.

Sodium alginate may be characterized as a hydrophysic colloidal polysaccharide,[5] Algin has some properties similar to those of pectin and gelatin and other properties recall the vegetable gums, but algin is physically and chemically distinct from all of these colloids. Algin should also be distinguished from agar and Irish moss (carraghren), which are also derived

from marine plants but are chemically different from the alginate.[3]

Sodium alginate is a white to light cream colored, amorphous, odorless and tasteless powder. Sodium alginate is soluble in both hot and cold water, but its solubility in water is limited by the viscosity of the resulting solution. The viscosity of sodium alginate solutions depends on a number of factors. The degree of polymerization attained and controlled during manufacture is an important consideration; highly polymerized sodium alginate is more reactive than the lower polymers. Viscosity is also affected by the concentration, the temperature and by foreign substances such as electrolytes and organic materials. An increased degree of polymerization in the alginate or a higher concentraion of the compound markedly increases the viscosity. Increasing the temperature of an algin solution causes a decrease in the viscosity, but if the temperature does not exceed 50° C this decrease is reversible. However, prolonged heating at high temperatures may cause permanent lowering of viscosity due to depolymerization of the algin. Storage at normal temperatures does not perceptibly alter the viscosity of properly preserved solutions.[4]

Sodium alginate is compatible with a wide variety of substances. Water-soluble gums, proteins, soaps, starches, sugars, soluble oils, glycerine, sodium silicate solutions and many other materials blend readily with algin.[6] Strong acids precipitate alginic acid from sodium alginate solutions. In solution, sodium alginate reacts with most metallic ions to give water-insoluble metallic salts. There are important exceptions, however; these being the alkali metal, ammonium, magnesium and ferrous ions, which form soluble alginate salts. The metallic alginates can be solubilized by the addition of a strong ammonia solution, but when the ammonia evaporates off the alginates revert to their insoluble form.[5]

The reactivity of sodium alginate with metallic ions is an important consideration in many of its applications and must be carefully controlled to avoid undesired thickening, precipitation of coagulation. On the other hand, the careful addition of certain salts, particularly calcium salts, affords a convenient method for regulating the gelling of alginate solutions.

As with most natural colloidal materials, alginate solutions are subject to biological attack and decomposition. Hence a suitable preservative should be included in these preparations. Formulin, sodium benzoate, various substituted phenols, or the esters of para-hydroxybenzoic acid may be used. One producer reports good success with a combination of methyl para-hydroxybenzoate and butyl para-hydroxybenzoate in a ratio of 1 part of preservative to 2,000 parts of completed solution.

Aqueous solutions of sodium alginate are viscous, nearly colorless, odorless and tasteless. For many pharmaceutical and cosmetic purposes, solutions containing from 2 to 4 per cent of algin have been found convenient.[8] To prepare the solutions, sodium alginate is added in a thin stream to either hot or cold water with constant stirring. If it is present or permissible in a formula, the use of glycerine facilitates solution and prevents lumping. The alginate being wet with the glycerine before adding to the water.[9] When time is not a factor or when suitable turbulent-agitation equipment is not available, the algin may be sprinkled slowly into the water under manual agitation. After a few hours, the alginate will be dissolved. This procedure may also be used when other materials compatible with algin have been previously added to the water.[7]

As was pointed out[10] a few years ago, sodium alginate is very economical to use because, by the addition of the correct proportion of calcium ions in the form of a calcium salt like calcium citrate, mucilages of very low concentration may be prepared to have any desired viscosity and consistency. This reactivity enables algin to be used in any given concentration to form either thick true solutions, semi-mucilages similar to those made with tragacanth or karaya, or firia transparent gels or jellies comparable to products made with agar, gelatin or Irish moss.

In other words, by carefully regulating the calcium content it is possible to control the viscosity or thickening of an alginate solution or even set the algin as a gel which is stable and does not "bleed."[11,12] For example, according to Bergy,[9] a semi-mucilage may be prepared by dissolving 1 to 1.5 parts of sodium alginate in 90 parts of distilled water. Slurry (e. g. incorporate slowly as a thin mixture) 0.12 to 0.14 part of calcium citrate in 30 parts of distilled water. Add this to the alginate solution and let stand for about two hours, after which thickening will be completed.

If a gel is desired, it may be prepared by dissolving 2 parts of sodium alginate in 90 parts of distilled water, to which a preservative has been added. Slurry 0.3 part of calcium citrate in 8 parts of distilled water and then mix throughly with the algin solution. Let stand to age for several hours until thickening is complete.

Two recent patents are of interest in this connection. One of these patents[13] describes how clear viscous solutions are produced directly from alkaline-earth alginates by adding compounds capable of sequestering the alkaline earth ions. Sodium hexametaphosphate, sodium tripolyphosphate and sodium citrate are used for this purpose. The patent also includes methods for preparing a glycerine hand jelly and an emulsion from calcium alginate. The second patent[14] gives details on the formation of gels through the use of alginate mixtures. In these methods finely ground calcium alginate is mixed with a water-soluble alginate and added to water to form a stiff gel. By such procedures, maximum gel strength is obtained with 30 per cent calcium alginate and 70 per cent ammonium alginate.

Interest in the potentialities of sodium alginate in drugs and cosmetics probably began about a decade ago as a result of several reports[9,10,15] on the methods

(Continued on page 842)

QUALIFICATIONS FOR A COSMETIC CHEMIST

BLACK STAR

● Many are of the opinion that a cosmetic chemist is someone who does not have to have very high requirements. However, Dr. E. G. Klarmann, vice-president of Lehn & Fink, in opening the scientific meeting of the Society of Cosmetic Chemists early this month, described the cosmetic chemist as follows:

For the benefit of those who are not, or not sufficiently, aware of a cosmetic chemist's qualifications, one might point out that, in the first place, he must have a good acquaintance with the several branches of chemistry, inorganic, organic, physical, colloidal, and analytical, since in his active work he deals continually with materials and procedures relating to these branches. In addition to this he must possess some knowledge of chemical engineering in order to be able to translate, or to assist in translating, the results of his laboratory efforts in terms of large scale production. He must be on speaking terms with physics, e. g., in connection with spectroscopy in the visible and ultraviolet regions, as well as in other chapters. He must be somewhat of a pharmacologist and toxicologist in order to form an intelligent conclusion as to the safety and efficacy of the materials considered as components of his formulations. He must have a smattering of dermatology in order to follow the discourses of this branch of a medical specialty where they concern themselves with the effects of cosmetics and of their ingredients upon the skin. Leaving the technical field, the cosmetic chemist is expected to display some legal qualities in understanding the laws and regulations governing the labeling, advertising, and selling of cosmetic products. And he is expected to be somewhat of an advertising expert by both way of contributing ideas to be developed for the dignified

(Continued on page 850)

EWING GALLOWAY

Seasonal Variation as a Factor in Toxicity

STUDIES of the action of drugs on man or other animals indicate the principal effects, and also show that the qualitative as well as the quantitative actions depend upon a number of factors. These include the species of animal, method of administration, age, sex, diet and many other factors which can be controlled without great difficulty. In spite of this, variations still appear in critical scientific investigations, even in the hands of the same investigator in the same laboratory under as nearly identical conditions as possible, and these factors are not capable of control by replication. Of these factors, variations produced by seasonal differences can be studied. In reading reports of toxicity by investigators, it is very rare that details are given with respect to seasonal variations. A search of the literature has revealed some definite information.

The existence of seasonal variations has been recognized for many years; in fact the 24 Aphorisms of Hippocrates deal with these features at length, discussing the seasonal incidence of diseases. Some attention has been directed to this factor in books, such as Smith (Health and Disease, as influenced by the Daily, Seasonal and other Cyclical Changes in the Human System, Publ. Walton and Maberly, London, 1861). Most of the text books make some general reference, to the effect that diseases or drugs or other conditions are more prevalent or more effective during one part of the year than during another season.

In reviewing specific data in the literature, some reports gave values obtained in daily tests during a part or all of one or more years; others reported only values obtained during a given month or the average values for a monthly or some other time period. Still other reports gave values by three month periods. We developed data as reported in each reference, then obtained the average or mean value for the entire investigation. We then determined the weighed average for each of the four quarters of the year: the first quarter representing January 1 through March 31; the second quarter April 1 through June 30; the third quarter July 1 through September 30; and the fourth quarter representing October 1 through December 31. Results obtained in successive years were combined within each

*Munch Research Laboratories, Inc., Upper Darby, Pa.
Presented at the Proprietary Association, Scientific Meeting, New York, December 5.

By JAMES C. MUNCH, AARON B. SLOANE and ALBERT R. LATVEN*

quarter. For example the study on ouabain in 1931 for the National Conference on Pharmaceutical Research, based on data in 12 laboratories reporting 1208 total assays on frogs showed a mean value of 0.48 mg/kg; during the first and third quarter of the year the average values were identical, or 100 per cent of that value; during the second quarter the quantity required to product the same intensity of effect was 104 per cent of the grand average value, and in the forth the quantity required was 96 per cent of the grand average. This would indicate that seasonal variation was slight in these studies. On the other hand when the data of Burn on International Standard Digitalis on frogs are studied, the average value was 0.45 mg/frog unit for all of the data; during the first quarter only 81 per cent of that quantity was needed, and in the third quarter 152 per cent of that quantity was required, indicating that the seasonal variation was significant and marked.

Data was grouped according to the animals used, on frogs, mice, rats, guinea pigs, rabbits, cats, dogs and some information on man.

Frogs show variations during the quarters, even in ouabain studies, which may be due to factors other than exclusively seasonal variations. Mice need further studies with other drugs; in some of our unpublished studies in connection with saliva tests on horses, no significant variations were noted. In studies on antu, using three separate strains of different susceptibilities, no significant seasonal variations have been detected. Literature reports mice to be more resistant to dysentery toxin (Shiga) in the summer.

Rats have been the basis of many metabolic studies, so the data on growth and on food consumption measured from the standpoint of Cal. appeared to be reasonably constant. There is a marked difference in susceptibility to antu. The seasonal variations in red squill needs to be extended. Seasonal differences have been reported in tissue susceptibility to neoarsphenamine, more damage to the liver and kidneys being produced in the third quarter than in the second (Nedzel). Literature reports indicate that rats are more resistant to the convulsive action of insulin during the summer period; on the other hand they are more resistant to the action of follicular hormone during the winter months. Caffeine is reported to increase the metabolic rate and sodium excretion in the winter-spring months, but to decrease these during the summer-autumn months. Further, the rate of growth of rats following the administration of testosterone is reported to be greater in the winter season as contrasted to the rate in the summer season.

Toward guinea pigs aconitine does not have a seasonal variation in our unpublished studies, confirming reports by Swanson. Literature suggests definite variations for other drugs. It has been reported that there is no seasonal variation in sensitivity to cavian poliomyelitis, but marine poliomyelitis appears more virulent in the fourth quarter.

Rabbits appeared to be somewhat more sensitive in the third quarter and somewhat more resistant in the fourth quarter in their responses to insulin and to the qonadotropic hormone of pituitary glands. Toward neoarsphenamine rabbits were more susceptible in the fourth quarter than in the third.

In light of the controversy regarding the cat assay of digitalis, it seems remarkable that no seasonal variation has been detected; neither does there appear to be a significant seasonal effect with dogs, to digitalis. Our earlier studies did not show any seasonal variations of cats in the bioassay of mydriatics and niotics.

A great deal of work has been published on seasonal variations in response in humans, but most of the reports studied have not been quantitative, or have not extended over a sufficient duration, under controlled conditions, to justify conclusions regarding exact changes throughout the year. Many reports have indicated differences in vitamin deficiencies of a qualitative nature, usually greater deficiencies being suggested in the second quarter of the year, apparently resulting from earlier dietary deficiencies.

(1) Detailed studies indicate that seasonal variations exist in animal responses to many drugs, but not to all.

(2) Since these variations are to the effects of the drug, their importance may be minimized by simultaneous assays of a uniform reference standard at the same time that the drugs are tested.

(3) This seasonal variation is associated with a rhythmic or cyclic alteration in the animals themselves, and is not due to controllable factors such as species, temperature, diet, weight, age, sex or other variables.

P-45---a new stock bottle in line with Swindell's tradition of quality

It's ready now! Swindell's new stock bottle, designed along classic lines that hold special interest for the perfume and cosmetic trade!

Available for immediate delivery in ⅛ ounce, ¼ ounce, ½ ounce, 1, 2, 3, 4, 6, 8, and 16 ounce sizes.

SWINDELL BROS., BALTIMORE, MD.
200 FIFTH AVENUE, NEW YORK • ROBERTO ORTIZ—HAVANA, CUBA

When you think of bottles think of

Swindell

PACKAGING and SELLING

SEGREGATION vs. DEMONSTRATION

UNEASY lies the head of a perfume or cosmetic manufacturer whose business depends largely on the demonstration system. Aside from all legal uncertainties, a growing tide of economic forces are certainly nibbling at the foundation of this system.

In the few places where tests have been conducted, it seems very clear that the segregation of products by classification in a retail department will produce more sales than the accepted practice of department stores to largely group cosmetics under company names. Such classifications as perfumes, hair preparations, men's toiletries, make-up, treatment and bath preparations lend themselves naturally and obviously to separate groupings. Certainly the store customer, who almost always feels that she is entitled to the luxury of examining a selection whenever she purchases a cosmetic not in the utility price range, must feel a great deal of frustration in the attempt to move from one demonstrator to another before selecting a purchase. Under such a system of classification, it is difficult to see how the demonstration system could survive. Certainly no store would go to the length of placing one manufacturer's demonstrator in charge of the entire competitive group of products, nor could a manufacturer afford a demonstrator in a section with just one or two products out of the entire line.

The rapidly growing use of P.M.'s, particularly during this spring, is another factor which is causing some worry to the men who sign the pay checks for demonstrators.

Girls in leading retail stores now have a wide variety of products which pay them a commission of 5 per cent on the retail sales price and a limited number of products for which they receive 10 per cent. There is even some suspicion that in certain stores and with select girls P. M.'s go even higher than this.

One perfume manufacturer who has built up a very large volume of business without demonstrators or advertising, but who has been a very liberal promotor of the P.M. idea, has been accused, any number of times, of raiding the demonstration system and of getting the benevolent attention of many demonstrators of competitors, once they have established their quota and secured their payroll.

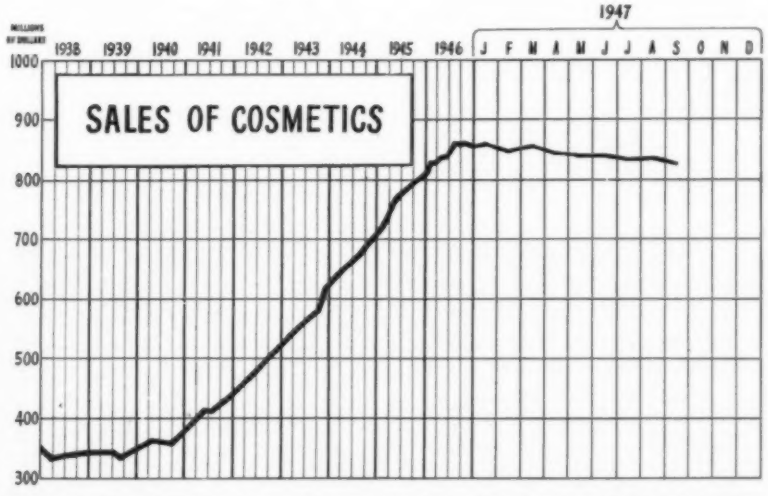
This spring period has been a heart breaking series of months for the companies supporting large demonstration systems. Probably over 50 per cent of the demonstrators have failed to pay their cost, and have become an excessive burden on the manufacturer. This has been reflected in drastic cuts in advertising, as costs increased in every direction.

It seems that the demonstration system, once established, is something like grabbing the proverbial tiger by the tail. Nobody yet, with an established demonstration system, has dared let go.

Perfume Advertising

The head of a French perfume company, whose excellent reputation gives some reason for listening to his opinion, stated recently that the perfume industry of this country could well afford to analyze closely the reasons why American women use less perfume per capita than French women, and why a larger percentage of French women are consistent users of perfume than is true of the women in this country. In this discussion he admitted that the extravagant increase in perfume sales in this country during the war somewhat confused the picture.

This increase, he claimed, was due altogether too much to a surplus of money to spend, and to what amounted to a wild, hilarious spending spree by many people who were tasting luxuries for the first time, but because of lack of education in the proper use of perfume, could not be depended upon to form a permanent perfume market here. This French perfumer claims that American perfume advertising has



Retail sales of cosmetics for the twelve months ended with September 1947 totaled $829,874,000. This compares with $835,146,000 for the twelve months ended with August 1947 and with $863,474,000 for the twelve months ended with September 1946.

neither been teaching the American women to enjoy perfume nor to use it properly and consistently. The advertising has been either exclusively devoted to securing a reputation for glamour, or even more than this, to establish the use of perfume exclusively as a sex lure.

While admitting that a basic, sociological factor causing the use of perfume is a biological one, this perfumer still insists that a primary reason for the consistent use of perfume by women is one of personal satisfaction for herself and a feeling that she is giving personal satisfaction in her entire appearance and in the use of perfume to people around her, both men and women.

There are certainly many people in the industry in this country, and an increasingly large number outside, who have been growing more and more critical of both perfume advertising and of the suggestions behind the names selected for perfume. Within the last few years, a number of prominent columnists and other writers have directed toward the perfume industry cynical and sarcastic remarks. It does seem possible that to a very large degree perfume advertising has long since exhausted and over-done the one basic appeal of perfume, and has very largely lost sight of the fact that perfume can be used regularly and consistently to give the same degree of personal satisfaction as does any of the various parts of wearing apparel.

It also seems that there is ample reason for people in the perfume business to give some serious thought to this whole subject, and to reappraise their thinking, and to promote their advertising more clearly on the basis of inducing American women to make greater use of perfume, purely on the basis of personal satisfaction and good grooming.

Faulty Yardstick

We have commented before on the similarity between the book business and our own industry. Some time ago, we reviewed a survey in the book business, which concluded that the name of the publisher had very little value in helping to market a new book, and that experience showed it did not pay to invest money to promote a book that was not clicking, but that it would pay to throw everthing the house had behind a book which proved to have popular appeal.

In other words, a famous publishing house with a famous name would have the advantage of capital, which would enable it to take the risk and publish any book; it would have the advantage of an established distribution system and the advantage of being offered many manuscripts, but if a little house, practically unknown, hit a hot number, it would sell in volume and become a leader, while the big house with the product which did not click could do nothing about it.

In the cosmetic business, particularly, there has been a strong tendency to lean on a company name and to expect this company name to carry the products. But experience has shown that this is not only a false assumption, but that it might even operate to the disadvantage of the company in its real growth.

We have seen the famous, familiar names in cosmetics bring out one dud after another, fumble from one section of the field to another, make very little progress over the last decade, and in the last analysis, holding their position almost entirely through an entrenched demonstration system.

On the other hand, in this period we have seen quite a number of companies started by individuals previously unknown to the industry, with very small capital, spring into prominence as dominant companies on the basis of a specialty or a limited group of products which happen to find real public appeal.

For another interesting parallel, we take the liberty of quoting Bennett Cerf, from a recent issue of the Saturday Review of Literature, on a sales experience in the book business. Nearly everyone in the perfume and cosmetic business will find this a very familiar episode.

A salesman suggested, "I guess you're pleased with the unlimited return privilege many publishers have extended to you." "Oh, yes," enthused the bookseller, "but I'm sorry to say I can't give you any more orders." "Why not?" asked the salesman. "I buy all my books from a jobber now," explained the bookseller. "I can't be bothered wrapping up all those separate packages for return to individual publishers!"

Selling Hair Preparations

A survey of 2000 salesgirls who are certificate holders of The Cosmetic School of Beauty Fashion indicates that the sale of hair preparations during recent months compared favorably with cosmetic sales generally. Those responding to this survey agree unanimously that hair preparations could be better sold if they were grouped in one place in the department. These findings are among those disclosed in BEAUTY FASHION'S November installment of the series, "Ask The Girl Who Sells It."

The survey continues in part as follows:

"The whole shampoo family is the healthiest family of all the hair preparations whether they be cream shampoos, egg shampoos, lanolated shampoos, soapless lathering shampoos, or just plain special shampoos. But hair dressings are rugged too, and various kinds of rinses aren't complaining. Home permanents were considered one of the most interesting developments in hair preparations in the last few years.

"Shampoo is, of course, the biggest selling item. But what are the runners-up? Tints and dyes, followed by rinses which are followed very closely by hair dressings constitute a combined total

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing the increase for the month of September 1947 as compared with the same period last year.

	Department Store	*Drug Store*		*Department Store*	*Drug Store*
Atlanta	+ 4	+10	Los Angeles	+ 1	−2
Baltimore	+ 3	−6	Memphis	X	+ 3
Birmingham	+ 7	+10	Minneapolis	+ 1	+ 9
Boston	−2	+ 2	Newark	+17	−3
Chicago	+11	+ 5	New York	+21	+ 4
Cincinnati	+11	+ 4	Philadelphia	+13	0
Cleveland	+10	−4	Pittsburgh	+46	+ 4
Dallas	0	+ 2	Seattle	+ 3	−1
Denver	X	+ 2	St. Louis	+14	−3
Detroit	+15	+15	San Francisco	+ 8	+ 3
Kansas City	+ 8	−3	Washington, D. C.	+ 7	−6

The Cosmetic Trend

Thinking of the prospects for the new year manufacturers of cosmetics and the buyers of cosmetic counters generally agree that the 1948 outlook should not be judged by the performance of the cosmetic markets during the first part of 1947, but rather by the much more representative conditions of its second half. That 1948 may bring the long expected stabilization of the cosmetic business upon its new post-war basis, and that it must be the main purpose of cosmetic selling from now on to hold the gains that were made during the war-years and lay the foundation for a new and more emphatic rise.

Reports of the Federal Reserve Banks indicate that toilet goods counters broke even during September of this year against September, 1946 in the Cleveland district. The West coast reports the same result for August. The Middle West looks as if it were catching upon its earlier losses. The fact that there are considerable differences between the various trading centers, and that heavy declines at some points pull down the comparative better records of other ones in the presentation of the national and district monthly averages, lets one suspect that much of this weakness is of local nature and can be corrected more effectively at the spot than by nationally applied stimulants.

This places the weight of the selling efforts of the industry upon heavier detailing and regional publicity. Pressure will have to be applied where the demand is weakening. Stores, generally, will work for more customers in the expectation that financial and physical volume will take care of themselves if they can raise the number of transactions. This goes for the whole of the store as well as for every single department, including the toilet goods and cosmetic counters.

of about 80 per cent of the votes for the next most popular type of hair preparations.

"Are products for the hair sold more easily as specialties or as part of a line? Almost 80 per cent of the quizzees believe that hair preparations should be sold as specialties. And, there's about the same percentage breakdown on those who find customers brand conscious against those who aren't.

"If we were to select the basic necessities for hair grooming for every woman, we would find these four absolutely elementary: shampoo, brush (or even two brushes), a hair dressing, and a rinse. We suppose everyone takes a comb for granted so we won't consider that in our basic selection.

"A goodly percentage of hair preparations must be sold through suggestive selling. A little better than 50 per cent, or half, of all the hair preparations are bought not on the customer's initiative but on the salesgirl's initiative. So, the keener the salesgirl, the keener the sales!

"If manufacturers were to add to their lines those items that salesgirls would like to have, they'd be very busy manufacturers indeed! Who doesn't already know that he who invents a real dandruff cure would make millions! This request comes in the same class as a bona fide hair grower. Let's have more hair fragrances—either a perfume or a cologne. Other dreams are for small home dryers, a non-oily something to keep hair ends from breaking, an immediate curl preparation which requires no wrapping, a lacquer that doesn't scale, and better curlers for home permanents. A very practical suggestion is for more hair lacquer pads that can be carried in the purse.

"Rinses and tints come in for much criticism. The salesgirls want more liquid hair rinses and tints. They want lemon rinses. They want a cream color rinse that won't comb out or rub off. They want a quick form of rinse for comb-dipping instead of having the entire head rinsed. They want safer and more natural looking hair coloring. In short, they want everything simpler and safer for the customer in this very important department of hair care.

"The salesgirls also have a good deal to say about brushes. Good massage brushes are in demand. And one suggestion is for a nylon brush with cream dressing in the handle which is self-applying as the brush is used.

"Most of our salesgirls believe that label instructions are already sufficiently explicit. But, there are some who disagree. A shampoo, for instance, should always state on its label whether it is intended for dry or oily hair. Dry hair problems are greater, by far, than oily hair problems say those girls who are bombarded across the counter.

"You can depend on about 25 per cent of your total volume on hair preparations as representing gift purchasing. Of all types of cosmetics, hair preparations are the least likely to be gift possibilities. Maybe something could be done about this by way of more attractive packaging, combination packaging, etc.

"Brush customers, we're told, are highly 'bristle conscious.' Moreover, they prefer a synthetic bristle three times oftener than a natural bristle. The customer is nearly always conscious of color, shape, material and styling in the hair brush she purchases. Ver-ry few customers are indifferent to these important elements. Customers are twice as apt to ask the salesgirl for nformation on brush care than not, either because they already know or they don't know enough to care. Only one girl in our panel admits that she, herself, couldn't advise her customers on brush care. All the others are very confident of their ability in this direction.

"Of the four types of shampoo which we have listed, votes are as follows: Lanolin 84 per cent, Soap 10 per cent, Soapless 5 per cent, and Cream 1 per cent. That answers that one. Now, should they be liquid, cream, powder, or jelly? 74 per cent say Cream. 25 per cent say Liquid. Only 1 per cent holds out for Jelly. Three to one, our salesgirls say that their customers are interested in what a shampoo is made of. It's only reasonable that if the shampoo is a liquid it would be packaged in a bottle, and if it's a cream, it would be in a tube or jar. So, the answer to package preference corresponds to the answer on what type of shampoo is preferred. The tube and jar leads over the bottle since the cream type of shampoo is preferred.

"The most important consideration on the part of a customer buying a shampoo is how good a cleanser it is. And she likes her shampoo to lather. The fragrance and the package are comparatively unimportant. Nearly all customers ask for a shampoo for dry hair or for oily hair, indicating that they expect a shampoo to be specialized to suit their particular hair problem.

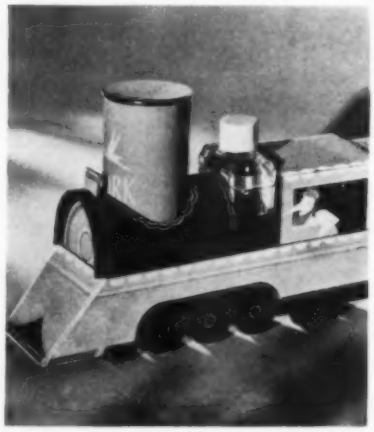
"There is a very pronounced trend today towards home hair care. Fifty-

May the peace and calm
of this timely scene bring our message
of good cheer and happiness
to you and yours.

BROCKWAY GLASS
COMPANY, INCORPORATED
BROCKWAY, PA.

Old South's Williamsburg box contains cologne, dusting powder, sachet, bath soap and bath oil, and is available in Plantation Garden or Woodland Spice.

Clo-Scent Inc. presents Clo-Scent, a perfume lacquer which is smartly packaged and contains enough fragrance to spread 7½ sq. ft. in drawers, linen closets, etc.



The "Stork Special" is an eye-catching gift package introduced by Armour Toiletries for Stork baby products. Sturdily constructed of pink and blue cardboard, it makes an unusual display unit.

six per cent of the members of our panel believe that this is based on the customer's desire to save money, 29 per cent believe that it is based on a desire to save time, and 15 per cent say both.

"With shampoo our lead item in the hair preparations field, it would seem that a shampoo rinse would be the first logical suggestive selling item. Half of our panel estimates that about 50 per cent of the customers could be persuaded to buy this extra item. Forty per cent of the girls replying believe that about 50 per cent of shampoo purchasers could also be sold a preparation for dandruff control, while another 40 per cent believe that 25 per cent could be sold. Half of the girls replying believe that 50 per cent could also be sold a hair dressing while another third of those replying believe that 25 per cent could be sold that type of product. Three-quarters of the girls believe that 25 per cent of the women purchasing shampoo could be sold a hair lacquer. Half of them believe that 50 per cent of shampoo purchasers are prospects for home permanents while another quarter believe that as many as 75 per cent of these customers could be sold a home permanent. It is somewhat surprising to note that three-fifths of those replying believe that 25 per cent of shampoo customers could be sold a tint or dye, while the other two-fifths believes that 50 per cent could be sold this product. And, incidentally, customers are very curious about the difference between a tint and a dye, and our well qualified salesgirls who can proudly show a certificate from The Cosmetic School of Beauty Fashion are able to answer such customer questions".

Supply and Demand

Fears of inflation, as expressed in President Truman's recent speech, leave most of the members of this industry thoroughly unperturbed. They know that the particular variety of inflation which is supposed to threaten this country is an excess of buying demand over production. There are very few manufacturers, in either branch of this trade, who have not passed through the period of demand which they were unable to meet, followed in an abrupt and startling way by a complete about-face in their business prospects.

Both drug and cosmetic manufacturers know what it means to suddenly find the last half inch of the distribution pipe-line really clogged up and also discover in some instances that the

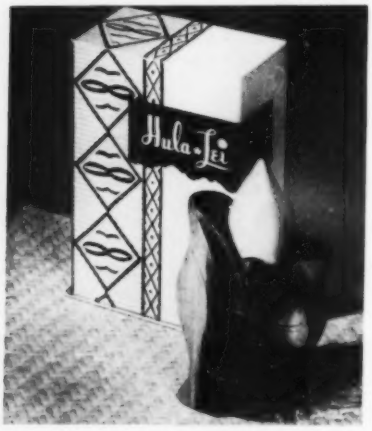
Jacqueline Cochran's Shining Hour toiletries are packaged in well styled blue and gold packages. The fragrance itself is rich and warm and delightfully feminine.

The newly designed Cashmere Bouquet talcum powder package which Colgate-Palmolive-Peet Co. is releasing in three sizes. Package design by Von Miklos.

A new formula in a completely redesigned bottle has been adopted by Wildroot Co. for its Wildroot hair set. This six-ounce oval bottle is easy to handle, light in weight, and has a wide mouth.

Le Gui toilet water by Duvelle Labs., Portland, Ore., is a delightful fragrance in a bottle of jade green with two-tone pink ribbon. There is also Le Gui parfum.

Dorothy Gray has introduced Savoir Faire a new fragrance in eau de parfum and dusting powder. There is also a Savoir Faire lipstick, vanity, physiodermic cleanser and night cream.



From Hawaii comes a new line of medium priced perfumes under the trade name of Hula-Lei. The perfumes are packaged in hand carved flacons in the image of flowers.

frantic demands of the customers had been greatly over-estimated.

These manufacturers believe that all of the commodities in short supply, the automobile for instance, will reach a point when the last consumer who was willing to bid and exert himself for a car, receives this car, and when the last dealer will suddenly find he has enough cars on the floor. This will happen suddenly, and in spite of the experience in furs, jewelry, leather goods, and a number of other industries, it will catch many people selling these under-produced commodities, asleep.

We may get a little bit more inflation in 1948 in some kinds of food, and in some heavy lines basically necessary in the European recovery plan. But in many other products there is some reason to believe that the shock of supply over-taking demand will hit many industries, and that 1948 may well begin a deflationary movement on very many new products.

New Uses For Talcum

John Cole, who was in at the birth of Revlon as an advertising agency man and who carried it through three advertising agencies during the 10 year period of its growth, has formed his own agency, Cole & Chason.

While the credit for the original idea behind Revlon, that is to sell color rather than lacquer and to make its products fashion, rather than just cosmetics, has been lost in the obscurity that usually clouds the early days of success, those who know this situation intimately either credit John Cole with this inspiration or credit him with actively seizing the idea and making it a reality. John has always liked to discover something in a product beyond its traditional use or character.

Now directing the early promotion plans for a revived Dejer-Kiss and Mavis, he comes up with the idea that talcum is not at all a cosmetic, but is really a commodity. We haven't had time to examine this idea, but we assume that John is thinking in terms of much larger sales for talcum, if the public can be educated to think of it in terms of an everyday utility, rather than surrounding it with the glamour of a cosmetic. Whether this idea is right or not, at least it is original thinking, and in the traditionalism and booming unanimity of cosmetic and perfume advertising of the last several years, it has, at least, the virtue of being different.

An attractive set offered by Ann Haviland consists of toilet water and sachet in Gardenia, Lily of the Valley, Wood Violet, Purple Lilac, Carnation or Perhaps.

Schiaparelli offers a new two ounce bottle of Shocking eau de Cologne. The new bottle makes its appearance with a Valentine promotion of heart shaped Shocking soap and a dram bottle of perfume.

Faberge has designed a new men's set—Aphrodisia For Men—dry, sophisticated for town wear, and Woodhue For Men—brisk and tangy for country clothes.

Artistic Presentations in PLASTICS

We specialize in distinguished catalin and lucite cosmetic containers including Cream Rouge and Eye Shadow Boxes, Solidified Perfume Boxes, Bottle and Jar Closures, Displays, powder and perfume Tester Displays, Trays, powder blending Spoons. 24 Karat, Gold Plating. Embossing — carving on Lucite and Catalin.

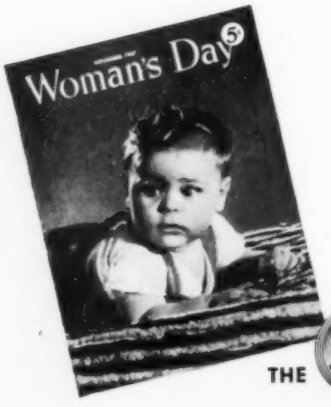
CRYSTAL PLASTICS, INC. *Manufacturers and Designers*
of Lucite, Plexiglas, Acetate & Catalin Products • 521 West 23rd Street, New York 11, N. Y.

Is she nuts about you?

The acquisitive instinct of Woman's Day's more than 3,000,000 women readers is surpassed only by their collective ability to buy. In '48, for example, these prudent, provident housewives will have at their disposal no less than $10,287,000,000 with which to satisfy their families' appetites for

$3,726,000,000 for Food and Drink
$1,863,000,000 for Housing, Household Appliances and Furnishings
$1,377,000,000 for Clothing
$ 648,000,000 for Transportation and Recreation
$ 291,000,000 for Drugs
$ 243,000,000 for Personal Services

Further, consider that (1) 71% of Woman's Day readers are concentrated in cities of 10,000 and over. (2) Woman's Day readers comprise the greatest percentage of housewives and mothers of any women's service magazine. (3) Woman's Day enjoys the greatest single copy sale (100%) of any magazine in existence. (4) Woman's Day (without advertising inducement) has received more than 600,000 reader letters, more than 700,000 requests for instructions in a single year. (5) Woman's Day readers constitute the greatest concentration of price-conscious, economy-minded women in these United States. Advertisers who count costs court women who count pennies.

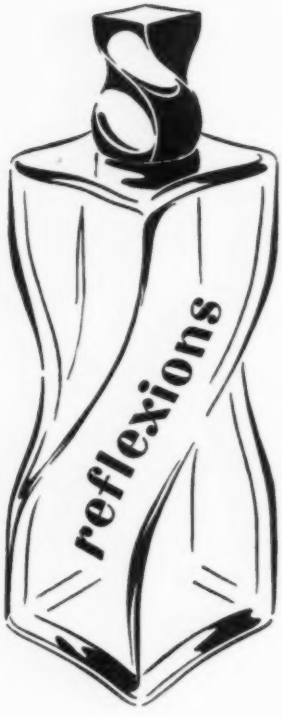


because buying is a woman's business:

a *Woman's Day* is never done *selling!*

THE A&P MAGAZINE

Found Money
"I know you will be pleased to learn that Woman's Day out-pulled by a minimum ratio of two-to-one, and sometimes as high as three- or four-to-one, any other publication on the _____* list for the past several years."
*Name of product and advertiser upon request.



. . . *where the* UNUSUAL *is* COMMONPLACE!

Executing unusual designs in glass containers is an every day job at Carr-Lowrey. For over 58 years we have worked hand in hand with manufacturers, producing private mold containers with exceptional fidelity. In beautiful hand blown glass, or made by machine to meet commercial price limitations, a Carr-Lowrey container is assurance of the finest in perfume and cosmetic glassware.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 500 FIFTH AVENUE (18) • *Chicago Office:* 1502 MERCHANDISE MART (54)

OPAL JARS • HANDMADE GLASS BOTTLES • MACHINE MADE FLINT GLASS BOTTLES

BRIDGEPORT

Metal Cosmetic Containers

Caps and Closures

Perfume and cosmetic manufacturers for more than a quarter of a century have recognized the precision craftsmanship of Bridgeport Metal Cosmetic Containers.

The consistent uniformity and beauty of our products has resulted in many leading manufacturers remaining as consistent users of Bridgeport Metal Containers.

When you are again planning a product that requires an original design be sure to examine the fine precision and decorative beauty of Bridgeport Products.

Bridgeport Produces

- Vanities
- Jar Caps
- Bottle Caps
- Lipstick Containers—Swivel, Slide, Automatic
- Dry and Paste Rouge Cases
- Powder Boxes
- Perfume Vial Cases and Caps
- Lip Brushes
- Drawn Talc Containers
- Miscellaneous Make-up Cases and Other Metal Specialties

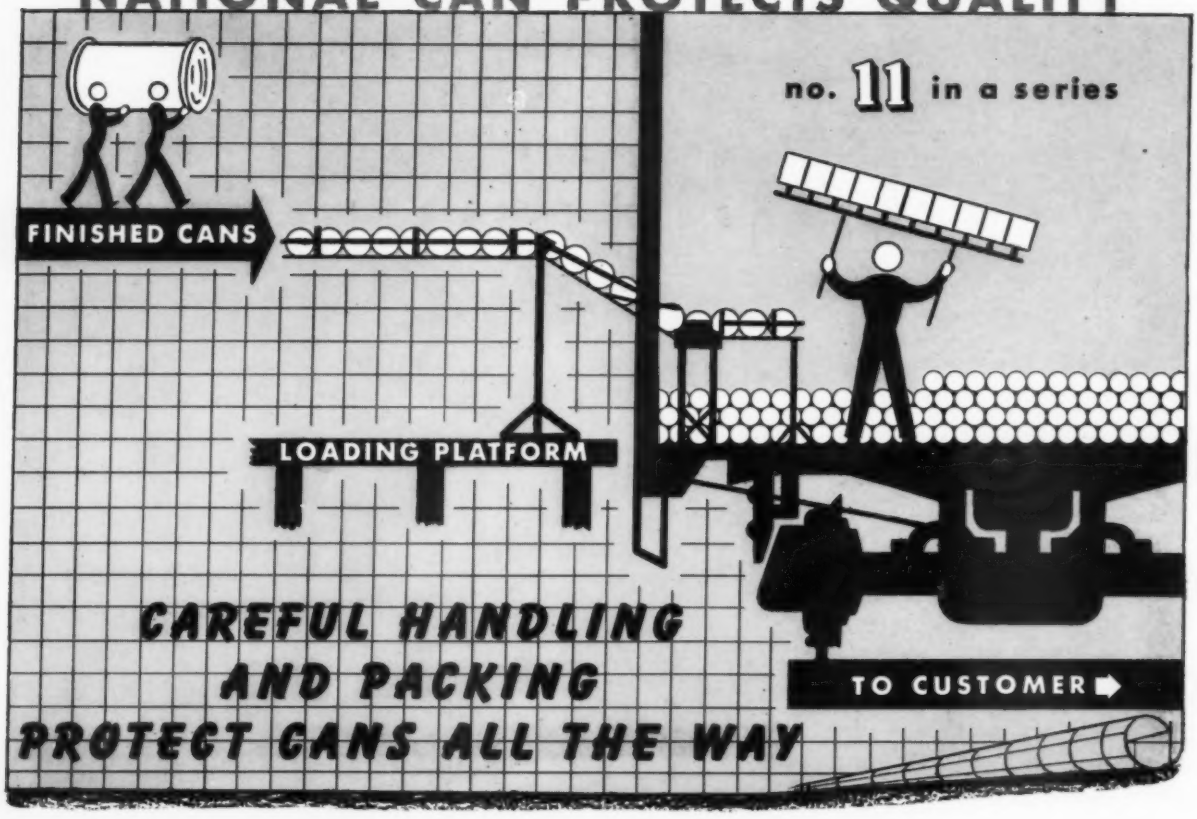
THE BRIDGEPORT METAL GOODS MFG. CO.

Established in 1909

BRIDGEPORT, CONN.

PHONE BRIDGEPORT 3-3125

NATIONAL CAN PROTECTS QUALITY



Right down to delivery of cans at a customer's plant, National Can Corporation "follows through" — backs up its system of modern manufacture with thorough and progressive methods of packing and handling.

Extra precautions at National Can include the wide use of automatic handling equipment to protect cans during the packing and shipping processes. In loading freight cars, for example, cans, after testing, are automatically delivered to expert stackers at the same high rate of speed as employed on the production lines. Cans are stacked according to an interlocking principle, and held in place by careful "shoring" thereby avoiding damage in transit. Similar precautions are taken in shipping by truck or boat.

Measures like these round out a quality-first policy that has typified National Can Corporation's business progress for nearly half a century.

NATIONAL CAN
CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS IN: BALTIMORE, MD. · CHICAGO, ILL. · HAMILTON, OHIO · BOSTON, MASS. · INDIANAPOLIS, IND. · MASPETH, N. Y. · CANONSBURG, PA. · ST. LOUIS, MO.

DISTRIBUTOR WANTED

FOR THE FIRST COMPLETE RANGE OF THE MOST EXCLUSIVE ENGLISH PREPARATIONS FOR MEN

U.S.A., Central and Latin American territories are available. The selected distributor will be supported by advertising.

The range comprises:

AFTER SHAVE LOTION, BAY RUM, BAY RUM BRILLIANTINE, BRILLIANTINE, TONIC SHAMPOO, HAIR CREAM, BRUSHLESS SHAVING CREAM, COLOGNE FOR MEN, SHAVING CREAM, SHAVING STICKS, TOILET SOAPS, STYLUS FOR THE HAIR, EAU DE QUININE, TONIC FRICTION

Stylus

FOR MEN EXCLUSIVELY

Communications should be addressed to the Export Manager:

R. HOVENDEN & SONS LTD., BERNERS STREET, LONDON, W.I, ENGLAND

A Reprint from Beauty Fashion

PERFUME AND COSMETIC manufacturers are spending many millions of dollars in advertising to bring customers—interested customers—to your store.

Alert, intelligent selling means that *you*—salesgirls and store executives—know in advance *what* these customers are interested in and *why* they are interested.

Read carefully, study the advertising pages of BEAUTY FASHION each month. Because here is the record of the finest perfume and cosmetic advertising. Here each month you see not only *what* manufacturers are saying, but *how* they say it.

Use BEAUTY FASHION *to help you anticipate your customers' wants...*

PRECISION-MADE "fitments"

to your Specifications

SCIENTIFIC perfection is your assurance with every dropper no matter what your specifications are.

We have successfully helped many manufacturers design and execute complicated "fitments" for Serums, Vaccines, Toxins, Medicines, Chemicals and Vitamins and we can, without hesitation, work out your dropper problems.

Expert workmanship and the finest materials assured in every dropper. All fitments are completely assembled. Prompt delivery. Send samples and specifications for quotations.

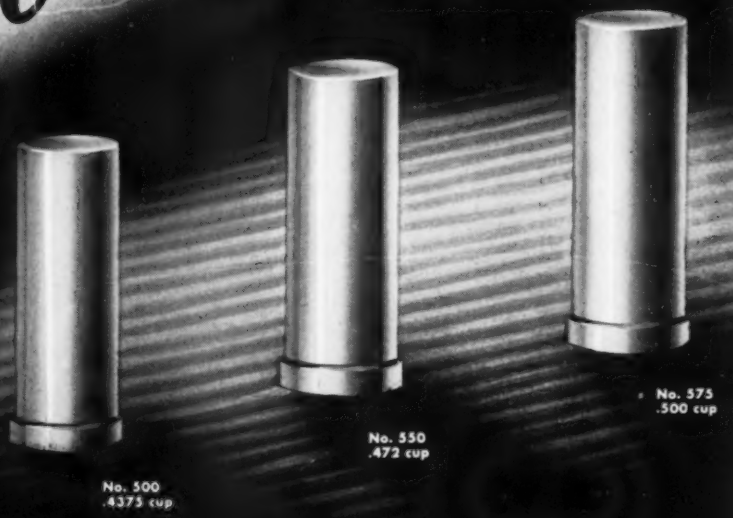
A Dropper to fit Your Every Need!

totus PHARMACEUTICAL LABORATORIES

70 E. COULTER ST. PHILADELPHIA 44, PA.

Rich Low BRASS

SWIVEL LIPSTICK CONTAINERS



"Fashioned Like Jewels"

THE ULTIMATE IN QUALITY

- De Luxe polished Rich Low brass — baked lacquer finish
- Free wheeling mechanism — It is impossible for the filler to swivel up while the cap is on
- "Click-Tite" closure*

PHONE, WIRE OR WRITE FOR SAMPLES

BRODER INDUSTRIES

INCORPORATED

167 WEST 64th STREET, NEW YORK 23, N. Y. • TRafalgar 7-0092

*Patents Pending

DODGE MILBOSSED-TOP CORKS

DODGE Milbossed-Top Corks give you extra selling power at the point of sale. These attractive closures add distinctiveness to your package while assuring complete sealing protection for your product.

Here is the closure that seals and reseals perfectly . . . pleases product users because they are easy to remove and replace. Dodge Milbossed-Top Corks are made of uniform, high grade natural cork and joined to durable, cleanly knurled hardwood tops. These are furnished in any color . . . embossed with a name or trade mark. Have yours embossed on a Dodge Milbossed-Top Cork—top choice for today's competitive market.

DODGE CORK COMPANY, INC., LANCASTER, PA.

Colorful folder shows you how Dodge makes the air-tight seal with sales appeal. You'll also see how well-equipped Dodge is to serve your closure needs. Your copy sent on request.

DODGE CORK CLOSURES

designed to Guard the Integrity of the Contents

Clean as a whistle

That's the way your mouth and throat will feel after you use Antiseptine . . . clean, cool and fresh as a winter morning. This product, distributed by The Penslar Company of Detroit, Michigan, is recommended as an effective mouth wash, breath deodorant or gargle. Its antiseptic action goes to work in a jiffy . . . a wise precaution against contagious "colds."

Antiseptine is sealed with dependable Crown Screw Caps—the same closure used on so many other prominent drug and food products. Experienced manufacturers know that in Crown products there are a lot of little things that make a big difference, like laboratory-determined liner material of proper thickness, uniformity of metal composition and precision manufacture. And of course there's the famous Deep Hook Thread, the exclusive Crown feature that gives increased sealing pressure with any given amount of application force. Crown Cork & Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

CROWN CLOSURES

"tomorrow is HERE," *says ROBERT GAIR*

GAIRCOTE REPRODUCTIONS ARE SO PERFECT, SO NATURAL THAT THEY ARE ACTUALLY "TRUE TO LIFE"

THIS ULTRA SMOOTH GAIRCOTE offers a new scientific process for exacting and fascinating multicolor reproduction of your products.

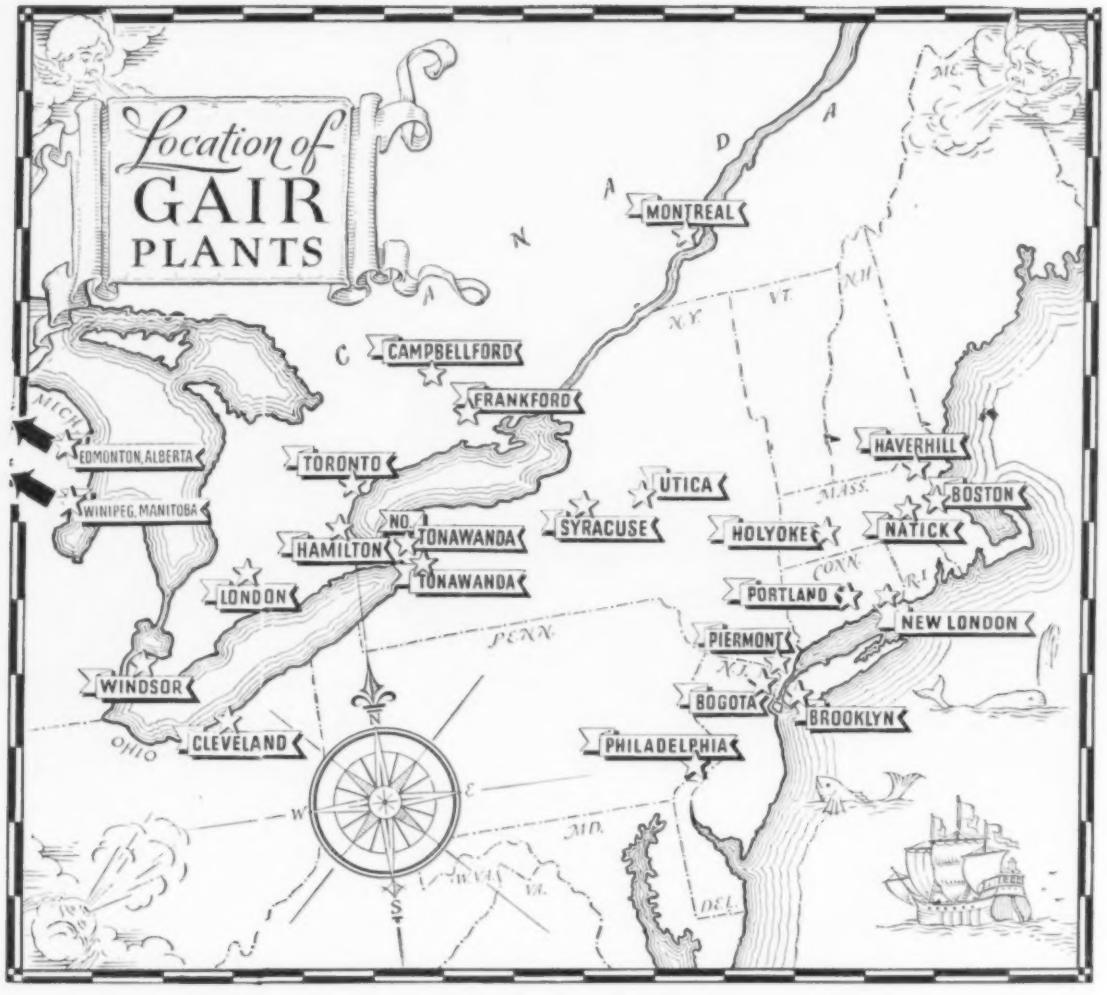
At last, with GAIRCOTE, your package will radiate and reflect the dramatic eye-appeal and buying impulse you have been striving to achieve for years . . . and with substantial economy, too.

GAIRCOTE multicolor reproduction presents an opportunity for a new version of leadership, when and where your package is called upon to meet competition.

INFORMATION FOR PHARMACEUTICAL INDUSTRY— GAIRCOTE color reproductions will enhance the appearance and prestige of your pharmaceutical packages. A GAIRCOTE representative will gladly supply complete information.

ROBERT GAIR COMPANY, INC. • NEW YORK • TORONTO

PAPERBOARD • FOLDING CARTONS • SHIPPING CONTAINERS



UNITED STATES

Shipping Container Plants

Syracuse Corrugated Box Div.	Syracuse, N. Y.
Boston Corrugated Box Div.	Newton Upper Falls, Mass.
Gair Bogota Corrugated Fibre Box Corp.	Bogota, N. J.
Connecticut Corrugated Box Div.	Portland, Conn.
Fort Niagara Corrugated Box Div.	North Tonawanda, N. Y.
Pennsylvania Corrugated Box Div.	Philadelphia, Pa.
Ohio Corrugated Box Div.	Cleveland, Ohio
Pa Pro Corrugated Box Div.	Utica, N. Y.
Holyoke Corrugated Box Div.	Holyoke, Mass.
Thames River Div.	New London, Conn.

Paperboard Mills

Gair Bogota Corrugated & Fibre Box Corp.	Bogota, N. J.
Gair Cartons Div.	Piermont, N. Y.
Haverhill Boxboards Div.	Haverhill, Mass.
Natick Box & Board Div.	Natick, Mass.
Tonawanda Boxboards Div.	Tonawanda, N. Y.
Thames River Div.	New London, Conn.

Folding Carton Plants

Gair Cartons Div.	Piermont, N. Y.
Eastern States Cartons Div.	Brooklyn, N. Y.
Cleveland Cartons Div.	Cleveland, Ohio
Natick Box & Board Div.	Natick, Mass.

CANADA

Folding Carton Plants

Gair Company Canada, Limited, Toronto, Ontario
Dominion Envelope & Cartons (Western) Limited,
Winnipeg, Manitoba and Edmonton, Alberta
The Adelman Paper Box Company, Limited,
Winnipeg, Manitoba

Shipping Container Plants

Gair Company Canada, Limited:

Toronto, Ontario	London, Ontario
Hamilton, Ontario	Windsor, Ontario

Paperboard Mills

Gair Company Canada, Limited:
Toronto Mill, Toronto, Ontario
Montreal Mill, Montreal, Quebec
York Mill, Toronto, Ontario
Dominion Mill (in reserve), Toronto, Ontario

Pulp Mills

Frankford Mill, Frankford, Ontario
Campbellford Mill, Campbellford, Ont.

ROBERT GAIR COMPANY, INC. • 155 EAST 44th STREET • NEW YORK 17, N. Y.

SMOOTH as GLASS

Smooth as glass and twice as fetching are these plastic closures by Standard Cap. All made from private molds in a wide variety of colors, they add much to the eye-appeal of the packages for which they were designed.

To help you create for your product a plastic closure of unusual form and appeal is an important part of our service. Or if you prefer stock designs, we have a large number from which you may choose. May we have the opportunity of telling you more about our products, facilities and service? Write us at the address below.

STANDARD *Cap & Molding* COMPANY, *Inc.*

Molders of Plastic Closures

307 S. EATON STREET, BALTIMORE 24, MD. • *Offices in Principal Cities*

SCIENCE...GUARDIAN OF QUALITY*

BERNARDIN
Metal Closures

Bernardin Closures have seemed literally to leap to success. In less than a decade, they have been chosen to protect scores of prized reputations. But this, remember, is our sixty-sixth year. So Bernardin success has big reason behind it—the advantages of long, specialized experience aided by modern science and invention. Bernardin Bottle Cap Company, Evansville, Ind.

Pictured—The Rockwell Superficial Hardness Tester—standard throughout the world—is an important factor in Bernardin quality control.

Since 1881—America's First Manufacturer of Metal Closures.

NEWS...

Dr. Suter Honored by A.C.S.

Dr. Chester Merle Suter, divisional vice president of the Sterling-Winthrop Research Institute, and director of chemical research, Winthrop-Stearns Inc., has been designated "one of the ten ablest chemists or chemical engineers"

DR. CHESTER M. SUTER

working in the United States in the field of medicinal chemistry.

Selection of Dr. Suter resulted from a reader poll conducted by Chemical Bulletin, publication of the Chicago section of the American Chemical Society.

Kimble and Laning Honored

Colonel Evan E. Kimble and Eugene L. R. Laning, who this year completed fifty years of service with Kimble glass, were guests of honor at a banquet and recognition ceremony held at Atlantic City, November 1. Colonel Kimble, founder of the Kimble Glass Company, and Mr. Laning, treasurer of Kimble since 1924, each received a recognition pin consisting of three diamonds set on a solid gold mounting.

In presenting the awards, Maxson A. Eddy, Owens-Illinois vice president, traced Col. Kimble's and Mr. Laning's long history in the glass industry and thanked them, on behalf of the Company and its people, for their long and able leadership. Both Col. Kimble and Mr. Laning are continuing actively in the affairs of the Company.

Col Kimble's first days in the glass business were spent firing a wood-burning "glory hole" for Whitall Tatum Company, and among his possessions is a withdrawal card which he received from the American Flint Glass Workers Union when he became manager of the lamp room.

Mr. Laning began his career as an office boy with the Cumberland Glass Mfg. Company of Bridgeton in 1894. In 1922 he joined Kimble Glass as secretary, and in 1924 he became treasurer of Kimble Glass.

Two Join Endo Products

Dr. Harold Blumberg, formerly with Winthrop-Sterling Research Institute has become associated with Endo Products, Inc., as head of the pharmacology laboratory.

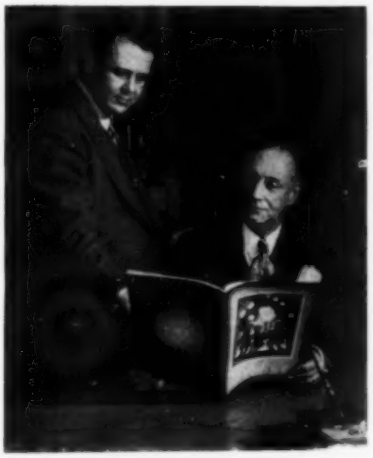
Ray Kupke, previously with Ayerst, McKenna and Harrison has joined Endo as head of production control.

Aluminum Seal's New President

Max M. Kipfer has been elected president of Aluminum Seal Company, subsidiary of Aluminum Company of America, Roy A. Hunt, president of Alcoa, has announced. Mr. Kipfer succeeds the late John E. Sharp.

Mr. Kipfer joined the Seal Company in 1924 and was made plant superintendent at its headquarters in New Kensington, Pa., in 1930. He was promoted to vice president and works manager in 1944, and to general manager in 1947.

A native of Zurich, Switzerland, Mr. Kipfer received his early education in that country and was graduated in mechanical engineering at Zurich in 1914. He came to this country in 1923 joining the Alcoa subsidiary the following year.



Dr. Robert M. Watrous, directing medical editor and Raymond E. Horn, president and general manager of Abbott Laboratories looking over the Christmas edition of What's New, Abbotts monthly publication.

Kerrigan Celebrates 40 Years with Merck

James J. Kerrigan, vice-president of Merck & Co., Rahway, N. J., celebrated

JAMES KERRIGAN

the completion of 40 years with the company on November 26. Merck executives and associates gathered at a dinner in his honor at the Essex Club, Newark, N. J. Mr. Kerrigan was presented with a handsome gold watch chain.

Trump Joins Advertising Agency

Frederic J. Trump, recently president of Royal Pharmacal Corporation, has joined McCann-Erickson, Inc., to handle the Revlon Products Corporation account. Mr. Trump has been active in the cosmetic, drug and toilet goods industry both in manufacturing and distributing phases and in retail merchandising for the past 15 years.

SOCMA Nominates Officers for 1948

Officers of the Synthetic Organic Chemical Manufacturers Association for 1948 are the following: President, Ralph E. Dorland, Dow Chemical Company; Vice presidents, Elvin H. Killheffer, of E. I. du Pont de Nemours & Co., and Eric C. Kuntz, of Givaudan-Delwanna, Inc., Treasurer, C. M. Richter, of the Pharma Chemical Corp.

Members of the board of governors for three years are H. W. Smith of Carbide & Carbon Chemicals, and T. H. Roberts, of Arnold, Hoffman & Co.

Volentine Lectures on Foreign Trade

Students at the American Institute of Foreign Trade, Phoenix, Ariz., have received a special course of five lectures

R. F. VOLENTINE

on the foreign marketing of ethical pharmaceuticals, delivered by R. F. Volentine, assistant foreign sales manager of Schering Corporation.

Mr. Volentine outlines the general principles and policies of overseas marketing in the prescription drug field and discussed their application to the specific problems faced in Latin America, Europe, the Near East, British Empire markets, and the Far East.

Dr. Gray Joins Parke, Davis

Dr. Jacques P. Gray has been appointed medical consultant to the sales and promotion division of Parke, Davis & Co. Dr. Gray has served for many years in public health work.

Cosmetic Chemists Announce '48 Slate

The Society of Cosmetic Chemists has announced its officers for 1948. Walter A. Taylor has been named president. He is with Ponds Extract Company. Vice president, Everett G. McDonough, Evans Chemetics; Secretary, Ruth Bein, Good Housekeeping Institute. Treasurer, Emery A. Emerson, Saran Company, Springfield, Mass.

Directors: Emil G. Klarmann, Lehn & Fink, and Raymond E. Reed, Reed Chemical Co.

Committee chairmen for 1948 are: M. G. DeNavarre, publications; John A. Killian, program; Marcel A. Suter, entertainment; Moody L. Crowder, membership; Curt P. Wimmer, medal award.

Henissart Named V. P.

F. E. Shoninger, president of Antoine Chiris Company, Inc., has announced that the board of directors elected Albert V. Henissart, vice president in charge of sales. Mr. Henissart has been associated with Antoine Chiris Company, Inc., for the past twenty years.

Leonard Drug Co.

A new company for the production of private label items, the Leonard Drug Company has been established according to an announcement by its founder, J. W. Brinken.

Mr. Brinken, a graduate pharmacist, was formerly with the Moffett Drug Company of New York.

Among the Leonard products are a complete lineup of vitamins, mouthwashes, shampoos and similar druggist specialties.

Located at 7 Central Ave., East Newark, N. J., the new company has complete facilities for private label production

Dietel Moved to West Coast

Herman J. Dietel, of Merck & Co., Rahway, N. J., is being transferred to Los Angeles, Calif., to take over direction of the Merck branch there effective January 1. Mr. Dietel is replacing G. A. Beauchamp, Jr., who is retiring. Mr. Dietel's position as manager of sales to drug and pharmaceutical manufacturers is being taken over by J. Mason Gastin who is moving to Rahway from the Indianapolis branch of the company of which he has been manager.

Hammer Named Sales Manager

Smith, Kline & French Laboratories have announced the appointment of John L. Hammer, Jr., as sales manager, Mr. Hammer has been with SKF since

JACK HAMMER

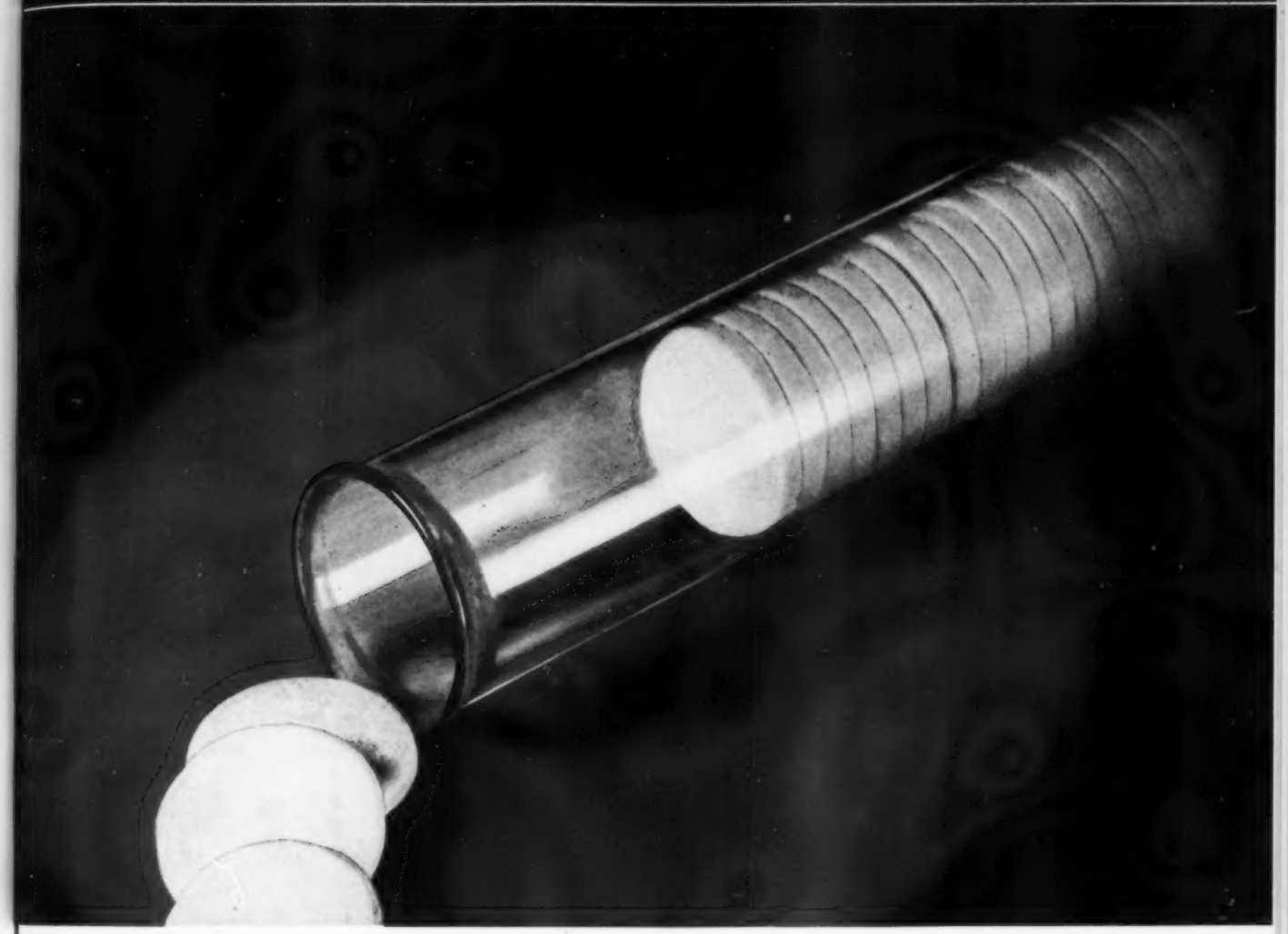
1937. He is a member of the executive committee of the National Drug Trade Conference, and a member of the Legislative Section of the American Drug Manufacturers Association.

Mack, Inc., Named Associated Agency

Morris L. Leninson, president of Associated Products, Inc., has announced the appointment of Norman A. Mack, Inc., New York as advertising and public relations counsel for Chen Yu, Cloud Silk and 5 Day Deodorant.

Workmen check the 2,300-pound insigne of Merck & Co., Inc., before elevating it to its position on the new research and development building at Rahway, N. J. The building is scheduled for completion in the spring of 1948.

Three essentials in making Bromide Preparations



- *Fine chemicals of measured purity*
- *Your technical skill in manufacturing*
- *Rigid laboratory control in your plant*

Every day the physician prescribes bromides for sedation, to keep patients as comfortable as possible.

Manufacturers, using care and skill in the making, see to it that bromide preparations are of the highest quality and purity.

They achieve their results, not by a single factor, but by employing all three of these:

– they choose, first of all, fine chemicals of uniform and dependable quality.

– they scientifically compound all the ingredients into a quality-finished product.

– they maintain rigid laboratory control throughout the manufacturing procedure.

These are, indeed, "essentials."

And the first of them—the selection of the basic fine chemicals—can have much to do with trouble-free manufacture, and with the success of the finished product.

That's why it's good sense to choose fine chemicals with purity to predetermined standards—Baker's Fine Chemicals.

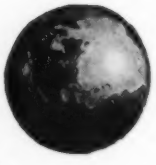
Baker's potassium, sodium and ammonium bromides are made in granulated forms particularly designed for direct compression into tablets. They also make unusually clear solutions.

Measured purity is the foundation upon which Baker has built its service to you. For many years, leading pharmaceutical and drug companies have known, and bought, Baker's fine chemicals (purity by the ton).

No matter what product you manufacture—if it requires one or more fine chemicals, specify Baker and you'll specify quality *at the beginning.*

J. T. Baker Chemical Co., *Executive Offices and Plant:* Phillipsburg, N. J. *Branch Offices:* New York, Philadelphia, Boston and Chicago

Baker's
FINE CHEMICALS



For this, and every other Christmas . . . One World

Florasynth LABORATORIES, INC.
CHICAGO 6 • NEW YORK 61 • LOS ANGELES 13
DALLAS 1 • DETROIT 2 • MEMPHIS 1 • NEW ORLEANS 13
ST. LOUIS 2 • SAN BERNARDINO • SAN FRANCISCO 3
Florasynth Labs. (Canada) Ltd.—Montreal • Toronto • Vancouver • Winnipeg
Florasynth Laboratories de Mexico S. A.—Mexico City

Richmond Heads New Sales Division

Establishment of a new sales division, a new sales district and the promotion of five sales representatives has been

J. F. RICHMOND

announced by Raymon E. Horn, president of Abbott Laboratories.

J. Frank Richmond will manage the new Eastern sales division, with headquarters in Washington. He joined Abbott in 1939, was made district manager in 1943. He will continue to manage the Baltimore branch as he has since it was opened in 1946.

M. DeWoody Wilkinson is appointed Southeastern divisional manager, sales manager, and manager of the Atlantic branch, succeeding the late C. B. Dyar. Wilkinson was made a district manager in 1934.

Hugh A. Farnsworth succeeds Mr. Richmond as district manager with headquarters in Washington. W. C. Jackson takes over Mr. Wilkinson's job as district manager with headquarters in Birmingham, and Joseph S.

M. DEWOODY WILKINS

Rowe becomes manager of the newly-created district with headquarters in Baltimore.

Andre Givaudan Returns to Switzerland

Andre Givaudan of Geneva, a director of L. Givaudan & Cie., S. A., and its affiliated organizations, has returned to Switzerland after a brief visit to the U. S., his fourth to this country since the end of the war.

Mr. Givaudan devoted his time here primarily to a study of the development program of Givaudan-Delawanna, Inc.

New Merrell Branches

The Wm. S. Merrell Company, Cincinnati, has opened two new distribution depots, one in Atlanta, and one in Bloomfield, N. J.

A part of Merrell's program of expansion, the new depots are designed to give faster and more efficient service to customers in the Southeastern and Middle Atlantic areas.

Owens-Illinois Expansion

Announcement has been made by Owens-Illinois Glass Company and International Paper Company, New York of the acquisition by International Paper Company of the corrugated plant and equipment which have been operated by Owens-Illinois Glass Company, at E. 50 and South Soto Sts., Los Angeles.

International Paper Company plans for the continued operation of this property for the production of corrugated products and will supply the full requirements of Owens-Illinois Glass Company's plant at Vernon, Los Angeles, in addition to other users of containers in the Los Angeles area. Personnel which have been employed by Owens-Illinois in the operation of its plant will continue with International.

Ungerer Sales Representative in South

Ira Bennett is covering the Southern territory for Ungerer & Company. His headquarters are in Ashville, N. C.

Guenther Addresses Maryland Chemists

Dr. Ernest Guenther, vice president and chief chemist of Fritzsche Brothers, Inc., was the guest speaker at a meeting of the Maryland section of the American Chemical Society, November 21, at Johns Hopkins University.

In his talk Dr. Guenther spoke about the development of the essential oil industry that has taken place in Haiti, where he recently visited. He also presented a series of colored motion pictures taken while he was there.

Two Upped by McKesson & Robbins

Promotion of two vice presidents has been announced by William J. Murray, Jr., president of McKesson & Robbins Inc.

I. H. BANDER

I. H. Bander, vice president in charge of drug and sundry sales has been appointed to the newly created position of vice president in charge of coordination of drug sales and buying activities. And also the appointment of Charles T. Lipscomb, Jr., as vice president in charge of drug sales. Mr. Lipscomb was formerly the vice president and assistant general sales manager.

In his new position, Mr. Bander will, be responsible for conducting drug sales manager's training schools and responsible for the development of general sales plans, deals and other sales helps. He came to the company in 1929 as vice president in charge of drug sales after serving 26 years with the L. K. Liggett Company.

Mr. Lipscomb has been with the McKesson organization since 1942.

CHARLES LIPSCOMB

He was named vice president and assistant general sales manager in 1945. Previously he had been associated with the Vick Chemical Company and the Coca-Cola Company. He is a native of Greensboro, N. C., and a graduate of the University of North Carolina.

Orris Root extractions

by
BRUNO COURT

A fine collection of products from
lected rhizomes of the Florentine l

- Orris Concrete Extra
- Orris Concrete Surfine
- Orris Absolute (Irone)
- Orris Liquid
- Orris Liquid Concentrated
- Orris Resinoid Extra for Extracts
- Orris Resinoid for Extracts
- Orris Resinoid Extra for Soap
- Orris "S" Resinoid for Soap Special
- Orris Resinoid Florentine

These Orris Root products of Bru
Court are offered exclusively
Naugatuck. Write for quotations
samples.

NAUGATUCK AROMATICS

DIVISION OF UNITED STATES RUBBER COMPANY

354 FOURTH AVENUE, NEW YORK 10, N. Y. • 14 NORTH FRANKLIN ST., CHICAGO 6, ILL.
LOS ANGELES • TORONTO • MONTREAL

Sole distributors for:
BRUNO COURT, S. A., Grasse, France • C. A. P. P., Casablanca, Morocco

T. G. A. Convention Committee

Karl Voss, chairman of the convention committee of the Toilet Goods Association, has announced the appointment of the following members to serve with him on that committee.

Paul E. Forsman of C. H. Forsman Company, P. E. Haebler of Goldschmidt Chemical Corp., M. Lemmermyer of Aromatic Products, Inc., A. R. Ludlow, Jr., of U. S. Industrial Chemicals, Inc., Edward D. Russell of American Magazine, Lamson M. Scovill of Scovill Mfg., Co., J. W. Thayer of Owens-Illinois Glass Co., K. W. Tracy of Fritzsche Brothers, Inc., and J. Blaine Walker of Hazel Atlas Glass Co.

The convention will be held at the Waldorf-Astoria Hotel, New York, May 18-20, 1948.

Aromatic Course Goes Over Big

Capacity registration has been recorded in the course in Aromatics, newly established this fall by New York University's Division of General Education. The course, given in the University's adult program, is intended for commercial purchasers and others in the perfumery business. It meets every week on Tuesday evenings under the direction of Samuel Klein, perfumer for Synfleur, Inc.

Schlienger Visits Here

Hubert Schlienger of Bertrand Freres, France, who is represented in this country by P. R. Dreyer, Inc., has been visiting the latter's various offices throughout the country with James V. Demarest.

Varvat Heads Roure DuPont

Gabriel Varvat with Roure Dupont since 1927 and one of the most well known perfumers in the country has

GABRIEL VARVAT

been elected president of that firm. Mr. Varvat became an American citizen in 1944.

Chiris Company in New Quarters

Antoine Chiris Company, Inc., has moved its administrative and general offices to 119 W. 57 St., New York 19, the telephone number is Circle 7-6683. The laboratories and warehouse of the company will remain at 115 E. 23 St.

F. E. Shoninger, who holds the dual position of president of Antoine Chiris Company, Inc., New York, and managing director of Antoine Chiris, Ltd., London, at the same time announced that the English Company has inaugurated its laboratories and warehouse at Tadwoth in Surrey where one of the most modern and complete laboratories of its kind in the United Kingdom has been created.

William R. Warner & Co., Inc., district managers and representatives from the Pacific Coast, Midwest and Southwest who met in St. Louis, where company officials announced the formation of a new biologics division to market Warner's line of antibiotics.

Jean Niel Inc., Moves

H. Retailliau, president of Jean Niel Inc., has announced that the company has moved to new and larger quarters at 135 Fifth Ave., New York. The new telephone number is Oregon 4-1858.

McDermott Heads Winthrop-Stearns Canadian Branch

Appointment of Charles B. McDermott as divisional vice president of Winthrop-Stearns, Inc., and general manager of its Canadian branch, has been announced.

Formerly vice president and director of the medical department of Winthrop Products, Inc., Mr. McDermott will make his offices at Windsor, Ont. Direction of sales remains with T. R. Rider, Canadian sales manager for Winthrop.

A graduate of the University of Illinois and a member of its faculty for two years, Mr. McDermott has since 1926 been associated first with Winthrop Chemical Company, Inc., and then with Winthrop Products.

Dr. Carroll Promoted

Dr. Richard Carroll has been promoted to the position of divisional vice president, Winthrop-Stearns, Inc.

Dr. Carroll will continue his duties as superintendent of manufacturing operations at the firms Rensselaer plant. Joining the company in 1942, Dr. Carroll was named assistant plant superintendent and was subsequently appointed to his present post in 1944. In that capacity he directs installation of equipment, chemical processing, tableting, ampuling and production schedoling of all pharmaceutical products handled at the plant.

New Plant for Gair Co.

George F. Dyke, president of Robert Gair Company, Inc., New York, has announced the completion of a million dollar plant for the Boston Corrugated Box division at 170 Fawcett St., Cambridge 38, Mass.

The new plant is the sixth occupied by the Boston Corrugated Box division since the inception of its predecessor company 40 years ago. The main manufacturing area of the plant is 180 feet by 500 feet, the largest single manufacturing floor in Gair's plants.

Gordon W. Olson, division manager is in charge of local operations, Frank E. Newton is sales manager, and Hubert D. Sewell, superintendent.

Endo Sales Conference

Plans for marketing new products developed in their research laboratories have been announced by Endo Products Inc., of Richmond Hill, N. Y., at its annual three day sales conference under the direction of Joseph Ushkow, president.

Salesmen's Association Nominations

The nominating committee of The Salesmen's Association of the American Chemical Industry has presented the following nominations for office for 1947; President, J. Robert Fisher; Vice President, William C. Harmon, Jr.; Treasurer, John Seidler; Secretary, Paul W. Hiller; Executive committee members are, Gerald S. Furman, Edward A. Bush, and Robert J. Milano.

Cullinane Advanced

Appointment of Michael J. Cullinane as merchandising director of The R. L. Watkins Company division, Sterling Drug Inc., has been announced. Mr. Cullinane was formerly manager of sales and advertising of Sterlings Cummer Company division.

A native of New York City, Mr. Cullinane joined the Sterling organization in 1943 after 13 years' service with H. J. Heinz Company as assistant to the sales manager.

In his new post Mr. Cullinane will be in charge of merchandising Dr. Lyon's Tooth Powder and Tooth Paste, Double Danderine and other Watkins products.

New Katz Catalog

Dr. Alexander Katz & Company, 4641 Hollywood Blvd., Los Angeles 27, has announced that its new catalog is now available along with the Company's monthly market report. Anyone interested in receiving either of these should write the above address.

Reid Elected Executive V.P. of N.Y.Q.

Francis J. Reid has been elected executive vice president of The New York Quinine & Chemical Works, Inc., according to S. B. Penick, Jr., president of S. B. Penick & Company.

Mr. Reid joined the sales division of the The New York Quinine & Chemical Works, Inc., in 1937. He was appointed sales manager in 1942 and has occupied that position until now. A graduate of St. John's University, he is a member of the Drug & Chemical Club, and is well known throughout the chemical and pharmaceutical industries.

Kusik Joins Heyden

Alan Kusik, formerly of Ciba Pharmaceutical Products. Inc., has been appointed sales manager of the biologicals division of Heyden Chemical Corporation.

Heads Cosmetic Firm

Theodore T. Toole, has been elected president of Universal Laboratories, Inc., East Orange, N. J., makers of Mavis, Djer-Kiss as well as the Delettrez line of cosmetics.

Employees at Southwest Airport, Philadelphia shown loading a shipment of anti-cholera vaccine from Sharp & Dohme aboard an American Overseas Airlines plane, to be taken to Cairo, Egypt, where a serious cholera outbreak is just now getting under control.

New Chairman of Board and President For Commercial Solvents

The board of directors of Commercial Solvents Corporation announce that at its November meeting, Major Theodore

MAJOR T. P. WALKER

P. Walker was appointed chairman of the board and Henry E. Perry, formerly executive vice president was elected president of the Corporation to fill the position left vacant by Major Walker's elevation to the chairmanship.

HENRY E. PERRY

Major Walker will continue actively to participate in the management of the corporation.

Felton Has New Perfume Catalog

Felton Chemical Company, Inc., now has ready for distribution a new and informative catalog, "Aromatics By Felton."

The catalog contains a comprehensive listing of aromatic and perfume materials, conveniently arranged according to usage, and clearly defined.

In addition, listings of many interesting and useful specialties will be found in the booklet which should be of interest to perfumers, soap makers and technical users of aromatics and perfume materials of all kinds.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

December ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1947

Claims Pickling Solutions Can Be Regenerated by Means of Ethyl Alcohol

Process Said to Be Efficient, Economical – Regains All Acid

An efficient and economical method of removing the bulk, or practically all, of the iron contents of pickling solutions and regaining all of the acid solution for further pickling treatment is based on the addition of ethyl alcohol to the spent pickling liquor. A complete description of the process is contained in a government report issued recently.

The alcohol is not added in a concentrated form but is diluted with three times its own volume of distilled water. One gallon of this mixture is added to every ten gallons of pickling solution and cooled down to room temperature. The solution is stirred thoroughly, all the iron precipitating in the form of iron sulfate. The alcohol can be removed by fractional distillation, while the liquor is reacidified to full strength.

Complete Regeneration

The liquor regenerated in this fashion is said to possess all the characteristics of a freshly made solution. Mixtures of surfuric and hydrochloric acids can also be regenerated by this process, the sulfates crystallizing out, while the harmless chlorides remain in solution.

The ethyl alcohol process is claimed to be of special importance for the regeneration of electrolytic pickling baths in which the articles after de-scaling are covered with a thin protective film of lead, zinc, copper, tin or cadmium.

NEW PACKAGE DESIGN

Solox, U.S.I.'s popular proprietary alcohol-type solvent for general use, is now packaged in attractive modern cans.

Many Important New Commercial Alcohols To Be Made Available From Fischer-Tropsch Process

Large Quantities Will Help Alleviate Continued Material Shortages —Products Will Include 2-Methyl-1-Pentanol, 2-Ethyl-1-Hexanol

Shortage of important alcohols currently experienced in the chemical industry will be greatly alleviated by new supplies to be made available by U.S.I. These products, basic to the industry, will be among the wide range of chemicals which U.S.I. will market from the American version of the Fischer-Tropsch process.

Increased Supplies of Ethanol, Butanol

Wartime shortages of ethanol and butanol did not stop with the end of hostilities. Demand for these versatile solvents exceeded expectations, and users continue to experience difficulty in meeting their total needs. The new Fischer-Tropsch source for these two alcohols has received enthusiastic response from members of the chemical and related industries.

***New Alcohols* in large quantities will be made available by U.S.I. from the output of the first Fischer-Tropsch plants. Constant research in U.S.I. laboratories accelerates the development of these new compounds.**

Makes n-Amyl Alcohol Commercially Available

In addition to ethanol and butanol, U.S.I. will also offer n-propyl and n-amyl alcohol. Normal amyl alcohol has not been available commercially before, and the commercial availability of n-propyl alcohol has been comparatively recent. The production of n-amyl alcohol will offer new opportunities for research and development on this basic chemical. The paint, varnish, and lacquer, and the pharmaceutical industries, in particular, are expected to make wide use of both these compounds.

MORE

New Cancer Treatment Shows Promising Results

The use of urethan as a treatment for prostatic cancer has shown promising results, according to a report emanating from a midwestern university. Urethan is said to reduce the size of the cancer and to bring about beneficial results even when other therapies have failed. Other experimenters have reported favorable results with the use of urethans on experimental animal tumors, and in the treatment of leukemia (cancer of the blood).

Nylon Hair Brush Broken? Here's How to Repair It

While many hair brushes today have nylon bristles, the handles and backs are usually made of some other plastic. If it's transparent, it's probably polymethyl methacrylate—and there's no trick at all sticking pieces of this together. The best adhesive is a solution of the plastic itself in acetone. Household cements are a second choice, but do a good job too.

Titanium Found to Keep Metals from 'Tiring'

When a piece of iron, like a wire paper clip, is bent many times, it gets "tired" and finally breaks with about half the stress required when the metal is fresh. However, by alloying the iron with certain other metals, of which titanium is most effective, it tires much less easily, according to a paper read recently before an American scientific society. The study showed that, after titanium, most effective in improving fatigue strength of iron are molybdenum, silicon, manganese, nickel, cobalt, and chromium.

8500 Rare Chemicals Listed

Need parachlorobenzotrifluoride? muconic acid? beta-isopropoxypropionitrile? potassium tertiary-butoxide? or any other rare chemicals? One way to locate them is to contact the National Registry of Rare Chemicals. Their files, which list the supply sources of more than 8,500 rare chemicals, are the most complete of their kind in this nation.

ADVERTISEMENT—*This entire page is a paid advertisement*

December **U.S.I. CHEMICAL NEWS** ★ 1947

CONTINUED

NEW COMMERCIAL ALCOHOLS

Variety of New Alcohols

U.S.I. will also market 2-methyl-1-pentanol and 2-ethyl-1-hexanol, new alcohols derived from Fischer-Tropsch aldehydes. The large quantity of aldehydes made from the Fischer-Tropsch process are of primary interest because they are raw materials for long-chain, high-molecular-weight alcohols. Included as possible products from synthesis beginning with aldehydes are: 2-methyl-1-butanol, 2-ethyl-butanol, n-hexanol, 2-ethyl-1-pentanol, and 2-methyl-1-hexanol.

Wide Range of Applications

Interest is focused on these alcohols to a large extent because their chemical combinations with monobasic and dibasic acids yield products of a wide range of applications. The acetates of the lower alcohols are widely known as lacquer solvents. Higher boiling esters resulting from the reaction of aliphatic acids and longer chain alcohols offer solutions of problems when higher boiling solvents are required. Of even greater interest, however, are the higher alcohol esters of the dibasic acids such as phthalic and sebacic. These esters are well known as plasticizers for a wide range of resinous materials.

Will Stimulate Development

The more certain raw material supply made possible by the Fischer-Tropsch process will undoubtedly stimulate development and increase the application of these materials. The accelerating use of all resins, with its correspondingly increased need for plasticizers, makes the provision of a new supply of alcohols especially significant.

Plant construction and marketing plans required by this new source of materials are being actively pursued, and it is anticipated that these new materials will be available within a two-year period. Prior to that time, U.S.I. will offer sample quantities of these new alcohols. The date of availability will be announced in these columns.

FIRST PACIFIC COAST CHEMICAL EXPOSITION ATTRACTS 15,000

Ninety-three exhibitors, representing leading manufacturers of chemicals and solvents on the Pacific coast and many national concerns with west coast offices, played host to approximately 15,000 visitors at the first Pacific Coast Chemical Exposition in San Francisco. The U.S.I. exhibit, featuring a wide range of U.S.I. chemicals, proved a popular meeting place. Here, left to right, seated, are R. C. Curtis of the Dow Chemical Co., San Francisco; S. L. Schwartz of the L. H. Butcher Co., Los Angeles; D. E. Eichelberger of the American Marietta Co., Seattle; L. A. Keane, U.S.I., New York; Ronald Benson, of the Carl F. Miller Co., Seattle; and Norman MacBeth of the MacBeth Corporation, New York. Standing, in the same order are G. C. Dohm, Clyde West, and R. E. Alexander of U.S.I., Los Angeles, and Wells Newell, U.S.I., New York.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing U.S.I.

To cut tinting time in oil paints and enamels, a new compound has been marketed which is said to eliminate all types of silking, flooding, and floating. **(No. 265)**

USI

A new rubber, claimed to have excellent dry heat resistance and to maintain its rubbery characteristics even at 300 deg. F. for 700 hours, is alleged to be easier to manufacture than butadiene rubbers. **(No. 266)**

USI

To improve the surface qualities of polystyrene plastics, a new treatment is offered which is said to increase mar resistance, repolishability, light transmission, and resistance to solvents. The process does not require special equipment and is completed in 20 minutes, the makers state. **(No. 267)**

USI

For use in dispersions and emulsions, a low-cost industrial product is now available in tank car quantities. This by-product is rich in gums and pentosans. **(No. 268)**

USI

A new fungicide, stated to provide permanent protection against dry rot, fungi, and most insects, is claimed to be easily-applied, non-toxic, non-injurious to wood or fabric and to maintain its strength indefinitely even after washings. **(No. 269)**

USI

To help prevent eye injuries from acids, an eye washing fountain is now on the market. It is ready for instant action on the scene of the accident, and is operated by the forehead, leaving hands free to open eyelids and wash both eyes, according to the manufacturer's description. **(No. 270)**

USI

To extend phenolic resin and protein adhesives, a new plywood glue constituent has been developed which is claimed to provide uniform spreading over protracted periods, and to decrease glue-line costs. **(No. 271)**

USI

An improved slide rule is now being produced. According to the manufacturer, the scales on the front of the rule are so arranged that only one setting of the hairline gives with each result its square, cube root, and logarithm. The log scale on the back gives five readings with each setting of the hairline. **(No. 272)**

USI

A new adhesive for carpets, described as a self-curing liquid, is said to be strong enough to butt-join sections of carpet padding without reinforcement. It can also be used to repair areas of dry rot, the makers claim. **(No. 273)**

USI

To prevent pre-cured rubbers from sticking, a new pre-cure wax finish is offered which is said to be applicable to molded, extruded, or calendered products and to serve as a mold release as well. **(No. 274)**

U.S.I INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND ST., NEW YORK 17, N. Y. U.S.I. BRANCHES IN ALL PRINCIPAL CITIES

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined

Ethanol (Ethyl Alcohol)
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96% Absolute
*Super Pyro Anti-freeze
*Solox proprietary Solvent

***ANSOLS**
Ansol M
Ansol PR
*Registered Trade Mark

ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Dibutyl Oxalate
Diethyl Oxalate

PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
*Diatol
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Alpha-acetylbutyrolactone
5-Chloro-2-pentanone
5-Diethylamino-2-pentanone
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Alpha-Oxalpropionate
Ethyl Sodium-Oxalacetate
Methyl Cyclopropyl Ketone

ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.

FEED CONCENTRATES
Riboflavin Concentrates
*Vacatone 40
*Curbay B-G *Curbay Special Liquid

ACETONE
Chemically Pure

RESINS
Ester Gums—all types
Congo Gums—raw, fused & esterified
*Aroplaz—alkyds and allied materials
*Arofene—pure phenolics
*Arochem—modified types
Natural Resins—all standard grades

OTHER PRODUCTS
Collodions
Ethylene
Ethylene Glycol
Urethan
Nitrocellulose Solutions
DL-Methionine

Printed in U.S.A.

Toohy Named General Sales Mgr.

John J. Toohy, vice president since 1945, has been appointed general sales manager of E. R. Squibb & Sons. He succeeds to a position held for many

JOHN J. TOOHY

years by R. D. Keim and Joseph C. Hearn. Mr. Keim is now active with Squibb as trade relations counsellor.

Mr. Toohy joined Squibb twenty-five years ago. During his first assignment he worked in the laboratories. Later he served as a field representative, and spent some years managing Squibb branches in Kansas City, Chicago, and Atlanta.

Pauley, Chicago Drug & Chem. Asso. Pres.

Gerald F. Pauley, general branch manager of Monsanto Chemical Company's organic chemical division sales office has been elected president of the Chicago Drug and Chemical Association. He takes office January 1, 1948.

Mr. Pauley, who has been in charge of Monsanto's Chicago office for 13 years, is a resident of Wilmette, Ill., and a graduate of the University of Illinois. He has been associated with Monsanto since 1927, when he was employed as a chemist at the company's headquarters in St. Louis.

T. O. Duff Leaves McKesson & Robbins

T. O. Duff regional vice president of McKesson & Robbins, Inc., has announced his resignation from the company effective December 31, 1947.

Mr. Duff became associated with McKesson & Robbins in 1929 when the Duff Drug Company, which he formed in 1919, merged with the McKesson organization to become the Chattanooga division.

In 1935 he was elected a director of the parent company and in 1942 was made regional vice president with the responsibility for McKesson & Robbins divisions in the South Central region.

The resignation of Mr. Duff's sons, T. O. Duff, Jr., manager of the Louisville division of McKesson & Robbins and Frank O. Duff, district operations manager, were also announced to become effective at the same time.

Responsibility for the McKesson divisions in Mr. Duff's region is being divided between regional vice presidents J. D. Crump of Macon and J. W. Wynne of Memphis. Rudy Jones, formerly division manager of the Cairo, Ill., division, has been appointed manager at Louisville replacing T. O. Duff, Jr., Ellis Minton, formerly sales manager at Cairo replaces Mr. Jones as manager of the Cairo division and James Siebert becomes sales manager.

Fischer With M. M. & R. 40 Years

William F. Fischer, sales manager and assistant treasurer of Magnus, Mabee & Reynard, Inc., celebrated the completion of forty years service with the company on November 15. A luncheon party in his honor was given by executives of the company.

Dreyer Buys N. J. Plant

P. R. Dreyer Company, N. Y., has purchased a warehousing and shipping plant at Whippany, N. J., which it expects to speed and improve service to its customers.

Dr. Hegarty and Dr. Wright Head S. & D. Research Department

The appointments of Dr. C. Paul Hegarty as director of the newly created antibiotic research department, and Dr.

DR. C. PAUL HEGARTY

L. D. Wright as director of nutritional research has been announced by Dr. L. Earle Arnow, director of research, Sharp & Dohme, Inc.

Dr. Hegarty, formerly a research associate in the department of bacteriology, joined the company in 1944.

Dr. Wright became affiliated with Sharp & Dohme in 1942 as research

DR. L. D. WRIGHT

associate in the department of pharmacology.

D. & O. Insecticide Div. Transferred

G. L. Haskell, president of U. S. Industrial Chemicals Inc., has announced that effective January 1 the Insecticide division of its subsidiary, Dodge & Olcott, Inc., will be transferred to U. S. I. and operated thereafter as an integral part of the parent company.

The coordination of U. S. I's activities in the insecticide and insectifuge field will continue to be directed by R. B. Stoddard. J. A. Rhodda will be in charge of sales and entomological research and development will continue under the direction of Dr. W. E. Dove, with the Fairfield, Md., laboratory headed by L. C. McAllister, Jr.

Camilli Appointed Danco to Board

Gerard J. Danco Inc., at a recent meeting of stockholders, elected Francois Camilli, to the position of director of the corporation. Mr. Camilli is president and general manager of Camilli, Albert & LaLoue, S. A., Grasse, France.

Whitman on Raymond Board

Ross Whitman has been appointed to the board of directors for Raymond Laboratories, Inc., St. Paul, Minn. The firm was purchased from William R. Warner Company by a group of twenty-five executives of the firm. It will continue to manufacture products exclusively for the professional beauty field.

Mr. Whitman will be director of research.

Oxzyn

SERVES THE TRADE EXCLUSIVELY

WITH QUALITY

LIPSTICKS

CREAM ROUGES

EYEBROW PENCILS

CREAMS

COMPACTS | ROUGE | POWDER | MAKEUP

EYE SHADOWS

WATERPROOF MASCARAS

FACE POWDERS

WE ALSO MANUFACTURE POWDER PUFFS, VANITY PUFFS, LOOSE SIFTER POWDER DEVICES AND SPECIAL LAMSDOWNE PUFFS

PRODUCTS MADE IN CONFORMITY WITH THE PURE FOOD, DRUG AND COSMETIC ACT
PRODUCTS LIABILITY INSURANCE CARRIED

OXZYN COMPANY

NEW JERSEY OFFICE
ONE PLEASANT AVENUE
CLIFTON

MANUFACTURING
Cosmetics of Quality
SINCE 1877

CANADIAN OFFICE
54 OSLER AVENUE
WEST TORONTO, ONTARIO

Heyden Injunction

A temporary injunction preventing the disclosure of trade secrets and other confidential information concerning formaldehyde and its derivatives has been obtained by Heyden Chemical Corporation against the Firm of Burrell and Neidig, Inc.

The order which also names as individual defendants Harry Burrell, Charles P. Neidig and E. L. Demarest, was granted by Vice Chancellor, John G. Gr mshaw, sitting at Paterson, N. J., in the court of Chancery of New Jersey.

The three men it is charged, in the performance of their duties, acquired intimate knowledge of the company's manufacturing processes and equipment. They organized Burrell & Neidig, Inc., after their resignation from Heyden.

It had come to the attention of the Heyden Company, the complaint stated, the Burrell & Neidig, Inc., were endeavoring to utilize the knowledge of Heyden's trade secrets to construct for other manufacturing plants.

A temporary injunction to this effect was granted, pending final hearing which has been set for the early part of next year.

Two Frazier Appointments

Frazier & Son, Belleville, N. J., manufacturers of Whiz-Packer Filling machinery announce the appointment of three companies to take over their national distribution.

Amsco Packaging Machinery, Inc., 31-31 48 Ave., Long Island City, N. Y., as Eastern states distributor.

Miller Wrapping & Sealing Machine Company, 18 South Clinton St., Chicago, for the mid-western and Southern states.

Simplex Wrapping Machine Company, 534, 23 Ave., Oakland, Cal. as West Coast distributor.

At the same time Frazier & Son has moved to larger quarters at 338 Cortlandt St., Belleville 9, N. J., it has been announced.

New Lemke Booklet

B. L. Lemke & Co., Inc., New York has made known that its fine and pharmaceutical chemicals are now also marketed in packaged sub-divisions. An illustrated handbook listing the products and describing their theraputic properties is available on written request to the company. The address is 248-250 West Broadway, New York 13.

Frisbie Appointed Asst. Director

Richard Frisbie has been appointed assistant director of the professional department of Bristol-Myers Company, New York, according to an announcement by Dr. George L. Wolcott, director of the department.

RICHARD FRISBIE

Mr. Frisbie is a graduate of St. John's University, Brooklyn, and holds degrees in chemistry and law. His business career of over ten years has been mainly with two leading pharmaceutical companies along sales and research lines.

He served in the Army as a lieutenant in the legal division of OMGUS, in Germany; he also acted as defense attorney in the Lichfield prison trials.

Knaack Heads Drug Export Club

Herman Knaack, of Zonite Products Corp., has been elected chairman of the Drug & Chemical Export Club of the Foreign Credit Interchange Bureau at its annual meeting in New York. Mr. Knaack succeeds F. Paul Smith of Bristol-Myers Co. Fred R. Collier of Johnson International was elected vice chairman to serve for the coming year.

Coast Scientists in New Laboratory

Truesdail Laboratories, Inc., Los Angeles, has completed a move to its own modernized and completely equipped building at the corner of North Figueror St., and West Ave., 41.

Boyer and Sebastian Form Own Company

Formation of a partnership of John W. Boyer and R. L. Sebastian under the firm name of Boyer & Sebastian to do consultant work in the field of chemicals and allied industries. The firm will maintain offices at 1740 K St., N. W., Washington, D. C.

Mr. Boyer has been practicing as a consulting chemical engineer in Washington since his resignation as chief of the alcohol and solvents division of the War Production Board. Mr. Sebastian, formerly a technical advisor to the Office of Production Management, concluded his government career as chief of the aluminum and magnesium division of the Civilian Production Administration and as a consultant to the Department of Commerce.

William S. Merrill Company professional service representatives who attended a sales training school conducted by the firm in Cincinnati. Seated (l. to r.) Joseph Scozzaro, Robert H. Bill, John Lindsay, Germain Bourque, Howard J. Taylor, Carl V. Gibson, Franklin J. Koontz. Standing (l. to r.) Herman Hessenbruch, Henry B. Young, George Nichols, Junius E. Davis, Robert Peterson, Gerald Garduno, A. S. Currie.

Karas Rejoins Rubinstein

Dr. Stephen A. Karas has returned to his position as chief chemist of Helena Rubinstein, Inc., after an absence of two years.

DR. S. A. KARAS

During the past two years Dr. Karas served as scientific consultant to the Department of Commerce visiting Germany to inspect the cosmetic, aromatic and pharmaceutical industries. Under his direction several reports on the subject were published.

This past summer Dr. Karas was again in Europe investigating new developments in aromatics and cosmetics. He accompanied Mme. Rubinstein on the inspection of her essential oil manufacture in southern France.

Earl Putt, President of Seil, Putt & Rusby

The directors of Seil, Putt & Rusby, Inc., have elected Earl B. Putt president and managing director. Dr. Harvey A. Seil, co-founder of the firm, whose health during the past four years has restricted his active participation in the work of the firm, has retired and his interest has been acquired by Mr. Putt.

At the same meeting it was announced that Alfred S. Moses was elected vice president and general counsel. Mr. Moses has specialized in the legal aspects of the Drug, Food and Cosmetic Act, as well as the decisions of the Federal Trade Commission.

Givaudan Opens New Branch

R. M. Stevenson, sales manager of Givaudan-Delawanna, Inc., has announced the opening of a branch office in Boston and the expansion of the sales staff in New York.

The Boston office, located at 140 Federal St., opening the first of the year, will be managed by George H. Blake, and will cover the New England territory.

Mr. Blake has been with Givaudan since 1926, and has been a member of the sales staff in Chicago, St. Louis and New York.

The New York sales staff of Givaudan will be strengthened by the addition of Arthur C. Gogarty, who will handle the New York City accounts formerly handled by Mr. Blake. Mr. Gogarty has been with Givaudan since 1941. He spent three years during the war in the Merchant Marine and, since his return, has been engaged in an inside capacity in the sales department.

Ackerman Heads Merck Quarter Century Club

Philip C. Ackerman of the medical department of Merck & Co., was elected president of the Merck Quarter Century Club at a recent meeting inNewark. Elected vice president of the club was Robert J. Strong, of the distributive sales department, and Walter L. Wilson, Sr., of the price control department, was elected secretary and treasurer.

Edward Hemlock

Edward J. Hemlock, 47, with Scovill Mfg. Company 33 years, died Wednesday, November 12, in the St. John's Hospital, Long Island City. His death was sudden and attributed to a cerebral hemorrhage. He was born in Waterbury, Conn., and started his career with Scovill there. He had been with the New York office as Sales Engineer since June 27, 1927. He had a wide acquaintance in the drug and cosmetic trade. He resided at 45-43 171st Street, Flushing, N. Y. His wife, Zita M. and one son Walter, two daughters, Margery and Ann Marie, and his mother, Julia Mary Hemlock, survive. The funeral services and interment were at Waterbury, Conn.

Elisabeth Magnus

Elisabeth G. Magnus, secretary of Magnus, Mabee & Reynard, Inc., died November 17 in Roosevelt Hospital after a brief illness. She lived at the Hotel Bossert, Brooklyn.

A graduate of the Gardner School, Miss Magnus has long been active in social service work in connection with the Brooklyn Eye and Ear Infirmary, the Faith School and the Red Cross.

George Karrass

George Karrass who was with Dodge & Olcott for forty-four years has died. At the time of his death Mr. Karrass was serving in the capacity of flavor and perfume chemist.

Philip Rising

Philip S. Rising, 71, manager of the Chicago office of the Pfizer Chemical Co., for 46 years until his retirement three years ago, died November 15, in Evanston Hospital.

PHILIP A. RISING

He had lived all his life in Chicago. His widow and two daughters survive.

J. J. Gossner

Joseph J. Gossner, manager of the foreign department of the Pneumatic Scale Corporation, Ltd., for twenty-five years, died at his home after having suffered a heart attack.

Born in Munich, Germany, in 1884, Mr. Gossner came to America when he was sixteen years of age. He founded the Imperial Export Company in 1907.

He is survived by his widow, two sons, and a daughter.

Dr. William Malisoff

Dr. William Marias Malisoff, director since its establishment two years ago of the Longevity Research Foundation, and former associate professor of biochemistry at the University of Pennsylvania died November 16, of a coronary thrombosis in his home at 360 W. 55 St., New York, after a day's illness. He was 52 years old.

Born in Ekaterinoslav, Russia, Dr. Malisoff was brought to New York at the age of ten. He acquired three degrees from Columbia University and New York University made him a Doctor of Philosophy in 1925.

Dr. Malisoff was the author of "The Span of Life." "A Calander of Doubts," "Meet the Sciences" and "The New Common Sense." He was the author of many scientific articles, and since 1934 he had edited Philosophy of Science Quarterly.

He leaves a wife, a son and two daughters.

Summit reached the top in the manufacture of Ammonium Thioglycollate the hard way: by letting the Quality of its product, not Competition, set the Price.

The quality of Ammonium Thioglycollate by Summit finds its expression in the purity of the product. This means:

complete freedom from thio diglycollic acid (thio ether) and iron . . .
an exceptionally low content of buffering material, such as dithioglycollic acid, glycollic acid, and salts . . .
the practical absence of heavy metals.

All this adds up to cold wave solutions that are:

uniformly stable . . .
that have no objectionable odor . . .
and that do not discolor.

The end result is:

a tighter curl . . .
and a more lasting one.

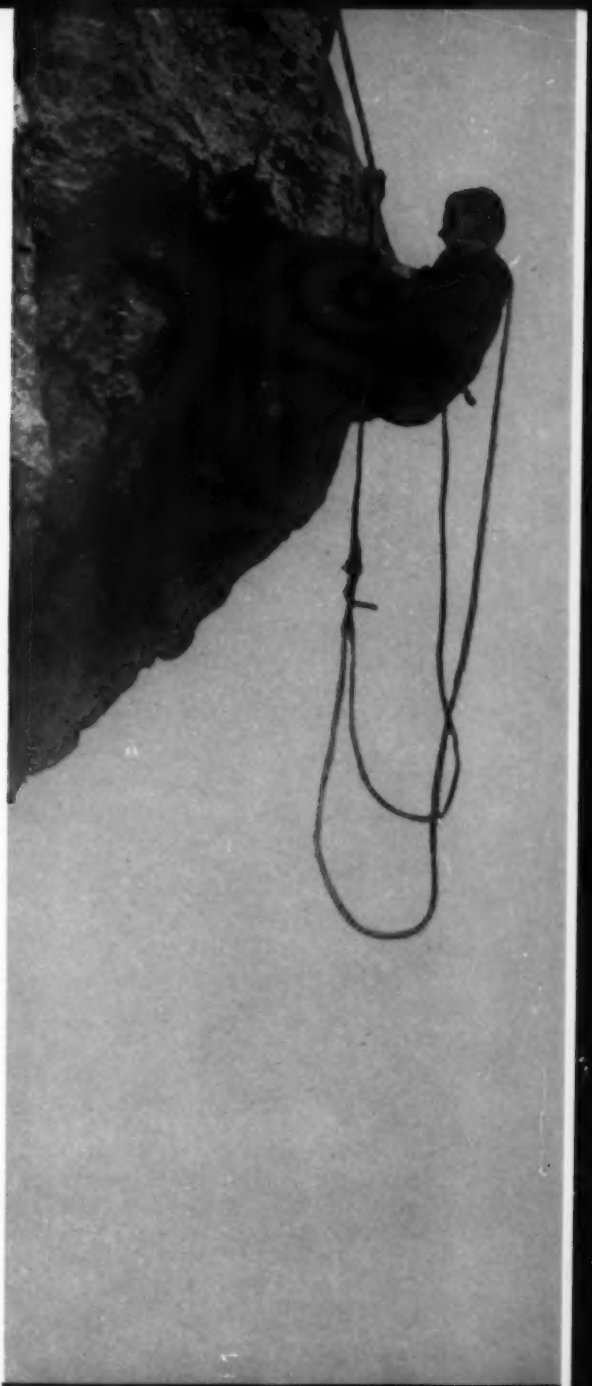
The purity of Ammonium Thioglycollate by Summit is a dependably unchanging factor. Unremitting and rigid scientific control of every batch of product keeps it so. "As it was yesterday and is today, so will it be tomorrow."

The slightly higher price paid by the many satisfied users of Ammonium Thioglycollate by Summit is regarded as a very modest premium for assuring the quality of their cold wave solutions.

Ammonium Thioglycollate by Summit is supplied exclusively in concentrated form. Summit does not supply ready-to-use solutions, either in bulk or otherwise.

Effective clouding and perfuming material for cold wave solutions has been developed by Summit. Samples of this material will be gladly submitted upon request.

Summit Chemical Products Corp.
Manufacturing Chemists
Belleville 9, New Jersey



Ammonium Thioglycollate

by SUMMIT

BUYING PERFUME IS LIKE BUYING ART

Beauty of interpretation, authenticity, quality, and the name of the artist play an important part in the final selection.

Duval perfumes are a reflection of nature in all its shadings. Therefore they represent beauty of interpretation.

Since Duval perfumes convey the true aroma of the natural flower, they are authentic.

Duval perfumes are made of the finest materials and meet the most exacting standards of the perfume and cosmetic industry. Therefore they have quality

The skill, imagination, and experience of Duval perfumers — past-masters in the art of perfumery — have established Compagnie Duval as one of the outstanding houses in the field. The name, therefore, is dependable.

Duval perfumes not only meet the rigid tests of all fine works of art, but also have an added something — that finesse which is the earmark of true artistry.

You are buying a work of art when you buy a DUVAL creation.

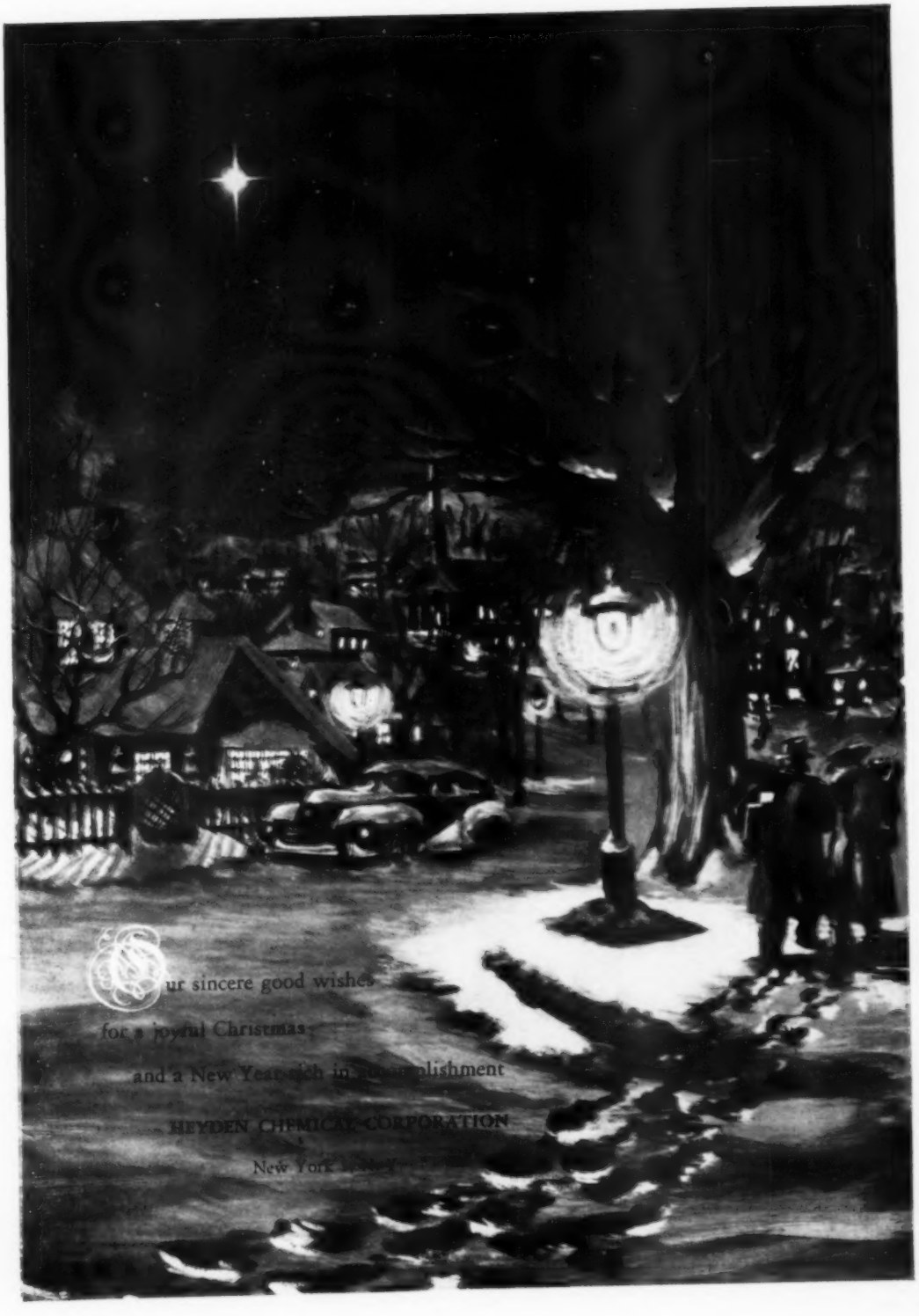
Compagnie Duval
DIVISION OF

S. B. PENICK & COMPANY

50 CHURCH STREET, NEW YORK 7, N. Y.
Telephone, COrtlandt 7-1970

S. B. PENICK & COMPANY · ASHEVILLE · NEW YORK · CHICAGO · HIPPOCRATES

735 WEST DIVISION STREET, CHICAGO 10, ILL.
Telephone, MOHawk 5651


ur sincere good wishes
for a joyful Christmas
and a New Year rich in accomplishment
HEYDEN CHEMICAL CORPORATION
New York

KIMBLE'S
New
TUF-TOP
Neutraglas
AMPULS

In hand sealing, operator easily holds top in fingers, requiring no tool. In machine filling, large sturdy top affords positive grip.

FEATURES

- NO CHIPS
- ✓ Handier Sealing
- Easy Entry of Needle
- Steady Racking

KIMBLE GLASS

The Visible Guarantee of Invisible Quality

Toledo 1, Ohio

DIVISION OF OWENS-ILLINOIS GLASS COMPANY

Famous Plastics For Famous Products

These Max Factor Hollywood molded Plaskon trays measure: Gray, 15½" x 10½" x 1⅜"; Red, 15" x 8½" x 1¾". These trays are molded by Plastic and Die Cast Products Corp. of Los Angeles, Cal.

A LEADER in the cosmetic industry, Max Factor Hollywood now introduces these new make-up sets in beautiful Plaskon Molded Color tray containers.

This is a cosmetic merchandising innovation, and again illustrates the effectiveness of Plaskon Molded Color as a medium for attracting consumer interest and promoting sales.

Max Factor Hollywood has used Plaskon molded color for a great number of its packages and closures for many years. It has taken advantage of the *thermosetting* properties which include excellent dimensional stability, low water absorption, non-softening action from heat and its ability to withstand common organic solvents.

Plaskon molding materials can be transformed into almost any distinctive, practical design or size of product. A wide range of clean, brilliant, permanent colors is available.

Max Factor HOLLYWOOD

The hard, non-porous surface of molded Plaskon will not tarnish, check or corrode. It is impervious to the effects of alcohol, acetone, oils, waxes or greases.

Molded Plaskon has many other features that meet special requirements in the drug and cosmetic fields.

Write for free illustrated book showing many uses of Plaskon* urea-formaldehyde and melamine-formaldehyde molding materials in manufacturing and merchandising.

*Reg. U. S. Pat. Off.

PLASKON DIVISION • LIBBEY-OWENS-FORD GLASS COMPANY

2110 Sylvan Avenue, Toledo 6, Ohio • In Canada: Canadian Industries, Ltd., Montreal, P. Q.

PLASKON

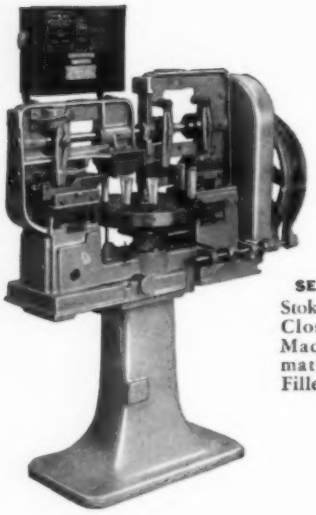
TRADE MARK REGISTERED

MOLDED COLOR

HAND-OPERATED
Stokes No. 47 Hand-operated Tube and Jar Filler. Hand-operated Closing, Sealing and Clipping Machines also available.

STOKES

TUBE FILLING, CLOSING AND SEALING MACHINES



SEMI-AUTOMATIC
Stokes Series 79 Tube Closing and Sealing Machine. Semi-automatic Tube and Jar Fillers available.

Stokes manufactures a complete line of machines for handling liquids, semi-liquids and heavy pastes . . . from simple, inexpensive, hand-operated models to fill or close or seal tubes, to large full-automatic machines which perform all these operations at high production rates and lowest labor cost.

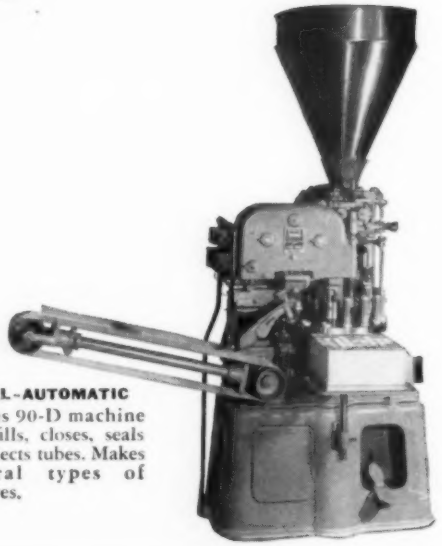
Stokes machines are remarkably versatile. Not only are types available for filling tubes with practically any material, but also a wide choice of sealing methods is offered including clips, double-fold, quadruple-fold and the Westite Hermetic Closure.

Another available feature is the patented Stokes method of "Fat-Filling" . . . permitting the use of a shorter tube for the same amount of material, or more material in the same tube.

Other Stokes machines are designed for filling jars and cans with a variety of products, in many fields such as petroleum, paint, chemical, food, pharmaceutical, etc.

Stokes' broad experience is available to aid in the choice of machines best adapted for your individual needs. We invite your inquiry.

Write for complete catalog No. 908.



FULL-AUTOMATIC
Stokes 90-D machine that fills, closes, seals and ejects tubes. Makes several types of closures.

F. J. STOKES MACHINE COMPANY
5932 Tabor Road, Philadelphia 20, Pa.
Branch Offices in New York and Chicago

F.J.Stokes **PROCESSING EQUIPMENT** FJS Est. 1895

Production Forum

By Francis Chilson

Industrial Consultant

Automatic Evacuating and Sealing-Off Machine

The latest development of an evacuating and sealing-off machine for ampules or glass vials, filled with a dose of medical powder or fluid solution has been announced by the Eisler Engineering Company, Inc., Newark, N. J., to improve and simplify pharmaceutical processing on a volume basis.

The complete assembly is mounted on a sturdy steel fabricated square table structure. A barrel cam indexing and driving mechanism transfers an intermittent motion to the turret, that carries a water cooled circular manifold, equipped with compression rubber chucks, into which the exhaust tubes of the ampules are successively inserted by the operator. During the subsequent travel through the gas or electrically heated oven each ampule is preliminary evacuated and automatically checked for air leaks by a leak detector with a bell signaling device. Defective ampules are isolated by actuating a push lever.

On leaving the oven the ampules in their following positions are further evacuated by a finishing high vacuum pump unit, and left in vacuum, or are automatically filled up with a protective inert gas just below atmospheric pressure, controlled by a reducing valve. Before the last position the ampules are automatically sealed off by the tipping torch and finally discharged into the chute.

The most important part of the machine, enabling its automatic function, is the Eisler Disc-Valve, consisting of two discs made of special alloy steel carefully heat treated, and accurately ground and lapped. These discs are provided with holes in their faces, and rest one above the other, the lower being stationary, the upper movable and indexed with the turret. This disc-valve is placed between the vacuum pumps and the heads of the machine (carrying the work to be exhausted) but makes connection by means of manifold and pipes, only when the coinciding openings in both discs are permitting it. Rigorous tests proved the action of this intricate and interesting detail to be absolutely reliable, it is claimed by the manufacturer.

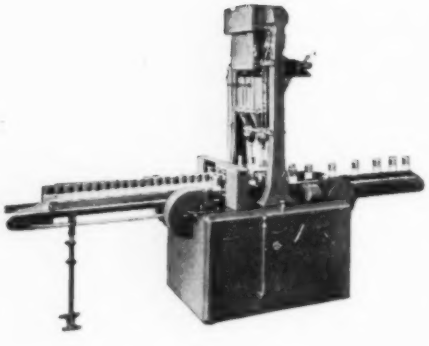
The operation of the machine is continuous and fully automatic. The operator has only to load the chucks with ampules and to remove the remainder of the exhaust tube. Production of the machine ranges from 500 to 750 ampules per hour depending on the size of the work. A one-half horse power electric motor provides the drive of the machine. Each high vacuum pump unit requires a one horse power motor.

Table Gummer

New Jersey Machine Corporation has announced that since they once more are sure of a source of supply of drive motors, they will resume full production schedule again on the Model 1337 Table Gummer. This machine is known in some trades as a label paster, and also a bench gluer. Its function is to apply adhesive to labels as they are fed through gluers preparatory to applying the label by hand.

The machine has been used extensively in food and drug companies for small run lots. It is made in several widths suitable for the work to be done, and utilizes twin roller glue method for positive glue control which is definitely achieved by the micro adjustment permitting a very thin film of adhesive on the labels to be applied so that there is no seepage of glue from underneath the edge of the label. As a safety factor this in important in protecting materials and merchandise from soiling and from a production viewpoint it eliminates the necessity of wiping off any excess glue that would ordinarily exude from underneath the labels. In addition the Table Gummer has a self cleaning device which simplifies operation and saves operator's time and temper.

. . . they chose US



The NEW Model JK
Fully Automatic Volume Filler
Weigher or Packer

Manufacturers of the powders illustrated above economically solved their filling problems with **U S.** Using the new fully automatic, twin station Model JK Packer, you too can achieve dollar saving results. And operators will praise its clean, efficient operation and its many new features.

The Model JK fills with closest accuracy up to 60 containers per minute on all kinds of powdered and granular materials. Normally the operation of this automatic machine is to fill by packing under controlled pressure; for those materials that require settling rather than packing, the new vibrating filling platform is furnished.

An efficient dust collector hood at the filling stations collects any escaping particles, keeps the machine and surrounding air clean and free of annoying dustiness. This, combined with the new shut-off gates which eliminate the drip at the augers, makes the filling operation absolutely clean.

Combine the foregoing with other new features designed to provide efficiency in performance and convenience for the operator and you have a machine that is the last word in modern high-speed powder filling.

US Automatic Box Machinery Co. Inc.

Owning and Operating

NATIONAL PACKAGING MACHINERY CO. • CARTONING MACHINERY CORP.

18 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: NEW YORK CLEVELAND CHICAGO
LOS ANGELES (KRUGH EQUIPMENT & SUPPLY CO.)

Humidity Indicator

A new quick-reading all-metal humidity indicator, for use in industry and laboratory has been announced by the Weston Electrical Instrument Corp., Newark, New Jersey.

The instrument is of wet and dry bulb type, self-supporting wet-bulb wick covering the thermal element, sturdy all metal construction, and a simplified slide rule

calculator giving relative humidity reading directly. The unit is light and can be swung if desired to create air movement.

The dry bulb gives the free air temperature. The wet bulb is surrounded by a wick saturated with water. Evaporation of the water cools the wet bulb below free air temperature by an amount proportional to the rate of evaporation. The rate of evaporation depends upon the amount of water vapor already in the air.

Air Filter Booklet

The application of replaceable type air filters for ventilating and air conditioning systems is explained in an eight-page booklet issued by the American Air Filter Company.

Descriptions and illustrations of each type filter are given, namely the Throway, Renu-vent, and Type G Drifilter, along with instructions for maintenance and detailed engineering and installation data.

The booklet is issued free upon request, write American Air Filter Company, Inc., 215 Central Ave., Louisville 8.

Straight Line Screw Capper

Be it one bottle, or a continuous line, the Pomona Automatic Screw Capper caps them as they come. Positioning of cap, screwing, and tightening is entirely automatic, indexed by the bottles as they pass through the machine on a straight line conveyor. Capping is accomplished with no shock to the bottles, no stopping, no change in direction, no splashing, no high speed mechanisms. The conveyor of the capping machine is adjusted to conform with line speed, and no further timing or indexing is required. Caps from a large hopper at the top of the machine are mechanically positioned into the cap feeding line at a rate automatically controlled by the rate of use. As each bottle enters the capper, it is positioned and held by rubber belts, moving at line speed, while the cap is screwed down and tightened.

Simplicity of design and flexibility of operation which typifies the Pomona Capper make it suitable for both large and small plants. The maximum capping rate is rarely exceeded even on quantity production lines, and the quick changeover time and adaptability to uneven rates of production make the machine economical for small plant operation.

The capper has a capacity of 150 containers a minute. Handles metal or plastic caps in sizes from 18mm. to 72mm. Handles cans or bottles from 2 inches to 15 inches high, and from one and one-half to six inches wide. Also containers of any shape, round, square, flat or triangular. Bottle size changeover is accomplished by simple adjustment of two hand cranks. Cap size changeover can be done in about fifteen minutes.

Further information may be obtained by contacting the Pomona Machine Works, Pomona, Cal.

Drum Pump

Utilizing the diaphragm principle, a new hand pump supplied by General Scientific Equipment Company, Philadelphia is both sturdy and efficient, and can be used for removing alcohol or any type of essential oil from drums or barrels.

Fast pumping, the manufacturer claims fifteen gallons of light oil per minute, it requires no priming, has no leather or rotating parts to wear out. The pump screws directly into the drum and no separate bung bushings are required for one and one-half or two inch drum openings. Waste is eliminated as a lift of the handle allows liquid to drain into drum and an automatic seal prevents evaporation.

More information may be had by writing to General Scientific Equipment Company, 27 St., and Huntingdon St., Philadelphia 32, Pa.

Laboratory Pulverizer

A specially designed mill for laboratory use in the grinding of analytical samples, is being put out by the Pulverizing Machinery Company, 141 Chatham Rd., Summit, N. J.

The Micro-Samplmill as it is called is furnished in two

CLEAN *and* FILL

50 to 75 GROSS of CONTAINERS PER 8 HOUR DAY

BOTH are 2-Tube Machines and handle two containers at a time. Are portable and come furnished with cord and plug for attaching to electric circuit.

Both are fully automatic in operation except for placing and removing of containers by operator and require only ordinary skill for efficient operation. They serve efficiently not only for small producers, but as "stand-by" units in larger plants.

The E-Z Two-Tube Cleaner

THE E-Z TWO-TUBE CLEANER

A bottle cleaner for cleaning new glass. Efficiently removes foreign matter from new containers by means of compressed air. Furnished with Air Filter ready for connection to customers' air lines. Easily connected to lighting circuit. Floor space 27 x 14 in. Write for Model E-Z Bulletin.

COMPANION Semi-Automatic Machines

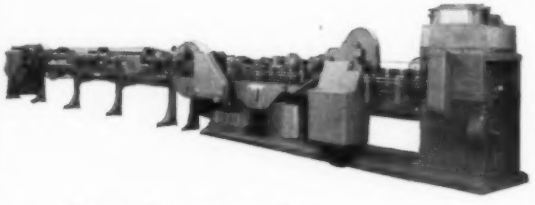
Model B-2 Semi-Automatic Vacuum Filler

THE MODEL B-2 SEMI-AUTOMATIC VACUUM FILLER is the new, improved filling unit that handles most any liquid from any size supply tanks and fills any containers from AGST size to 4" diameter. Has outstanding new features. Write for Model B-2 Bulletin.

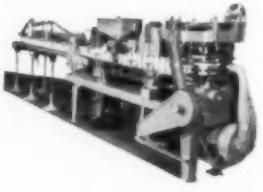
U. S. BOTTLERS
Machinery Co.
4013 NORTH ROCKWELL STREET
CHICAGO 18, ILLINOIS

MANUFACTURERS OF
PUMPS
CAPPERS
FILTERS
CONVEYORS
WASHERS & DRYERS
WASHERS
CORKERS
FILLERS

S&S NEVERSTOP CARTON FILLER & SEALER



Model "A" High Speed Carton Filling and Sealing Machine. Production 160 per minute.



Model "E" Carton Filling and Sealing Machine. Production 60 per minute.

The "Neverstop" automatically feeds and seals cartons while in continuous motion, so that high speed production is obtained with slowly moving mechanisms. Volume filling is also accomplished without stopping the moving carton.

The "Neverstop" is extremely adaptable. Weighing or auger feed filling machines can be combined with the "Neverstop" when materials require their use. For free flowing materials having nearly constant volume per pound, the filling mechanism is incorporated in the machine, securing the advantages of less cost and floor space. For smaller cartons a made-up bag (liner) may be automatically fed and inserted into the carton before filling and, afterward, automatically folded and crimped or heat sealed.

The "Neverstop" Machines are furnished for either hand or automatic carton feed. An extremely tight seal is assured, top and bottom, since both are made in the same way. All carton flaps are glued, the first wide flap folded being crowded over into the fold of the second wide flap as it is folded down.

Detailed information will be furnished upon request. A sample package will help in specifying equipment.

STOKES & SMITH Co
PACKAGING MACHINERY — PAPER BOX MACHINERY
4912 SUMMERDALE AVE., PHILADELPHIA 24, U.S.A.
FILLING • PACKAGING • WRAPPING MACHINES
Speeds to suit your needs—15-30-60-120 per minute
"Better machines for better packages"

models, one for bench use and a floor model. The former is for mounting on a laboratory bench. The latter with leg and ball bearing casters, can be moved about for use in the plant or laboratory. Both can be plugged into a 110 volt line.

The mill was designed for pulverizing analytical samples mixtures up to 7 per cent free of moisture. and it performs with equal efficiency on chemicals, pigments and food products, etc., such as processed with full-sized production units.

Complete protection against contamination is accomplished by use of stainless steel and by smooth interior surfaces which afford no harboring space for residues that might pollute.

Complete and thorough cleaning between batches is generally a matter of only a few minutes, depending on the type of material ground. A clean-out door in mill housing enables operators to easily brush residues from under screen into glass discharge jar. The grinding chamber is quickly and completely exposed by simply swinging back the hinged cover.

Manually operated inclined feed screw assures feeding of complete sample in the grinding chamber. All parts of unit are so easily accessible that loss of material is negligible even in samples as small as 10 gms.

Pocket Calculator

A pocket-size calculator for sequential sampling is available to those interested by writing to the Lightning Calculator Company, Inc., 496 Atlantic Ave., Brooklyn 17.

The calculator is so simple that the most inexperienced operator may use it in connection with the inspection of any production item. The calculator tells the operator how many samples to take, how long to continue sampling, and finally indicated whether the lot should be accepted or rejected.

Sequential sampling is based on a tailor-made program drawn up to meet the inspection needs of the user. If a plant already uses sequential sampling the calculator can be calibrated to fit the existing standards, or a sequential sampling program may be developed by consultation with a quality control statistician.

The calculator functions on the basis of five factors of quality control.

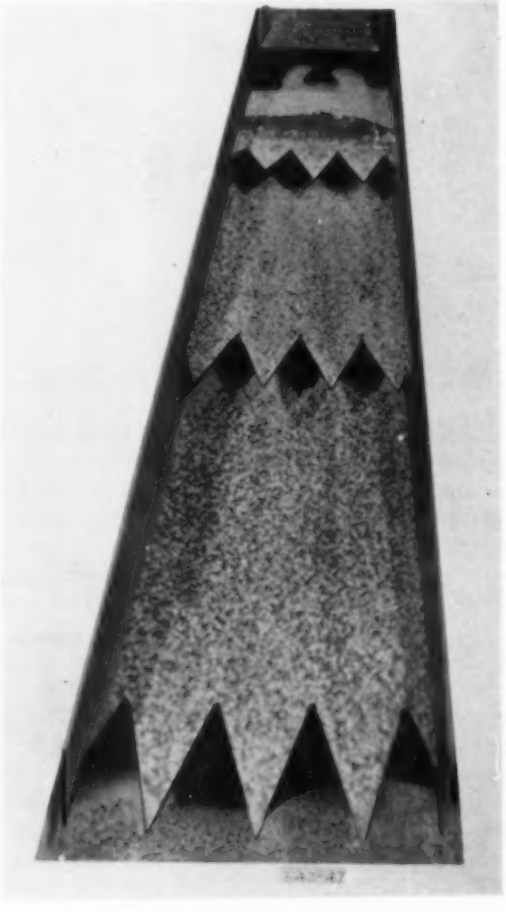
1. Acceptable quality level.
2. Unacceptable quality level.
3. Factory risk.
4. Customer risk.
5. Average outgoing quality limit.

Vibrating Mixing Conveyor

A new type vibrating conveyor known as the Mix-R-Step Conveyor has been announced by The Jeffrey Manufacturing Company, Columbus, Ohio.

It is designed with a series of stepped plates which produce a side slip as the materials fall from one step to the next. This side slip discharge causes an intermingling of particles, turnover being partially or completely effected.

When used for mixing operations, two or more free-flowing materials are accurately fed to the conveyor for mixing while being conveyed by vibration. The construction of the conveyor produces no degradation

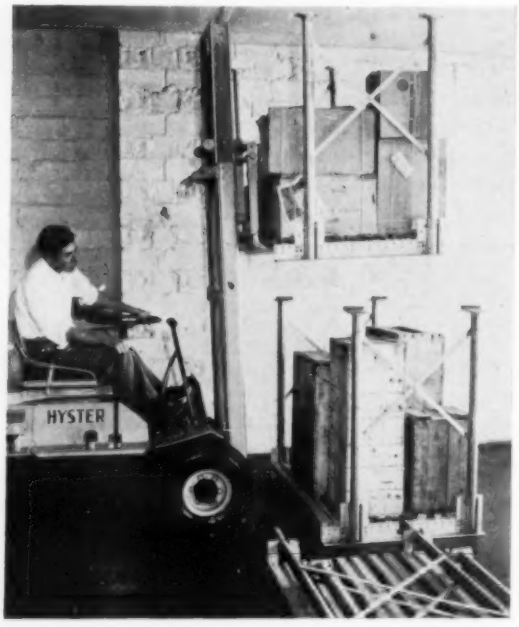


of material, the quality of product is maintained and no fines produced. Because of the material turnover feature the Mix-R-Step is especially desirable for conveying materials treated with infra-red or ultra-violet lights. This has made it possible to produce uniformly toasted materials. The Mix-R-Step type of conveying surface has been applied successfully on indirect type vibrating dryers and coolers where steam or chilled water are used to heat or cool the conveying surface.

The company also has just issued a new catalog on these various types of processing equipment. Write for catalog Number 804.

acking Pallet

As an addition to its line of aluminum material handling equipment, Tobey International Co., 7005 Southwestern Ave., Los Angeles, has produced the Stak-Rak.



Basically, the Stak-Rak is an aluminum pallet with four tubular columns at the outside corners for supporting tiered loads. These columns fold down to the top surface of the pallet, thus facilitating handling and storage when not in use. The Stak-Rak makes possible the palletizing and stacking of loads which are crushable or subject to flotation, either in transit or in storage.

The complete unit is fabricated of structural aluminum alloy. The dimensional load of the Stak-Rak is 48 inches by 36 inches by 4 feet high. Other sizes can be made available. Load capacity is 3000 pounds per unit. Units may be stacked three high in warehouses with a thirteen foot overhead clearance. Stacking with these units can be accomplished with any fork truck. The Stak-Rak weighs 53 pounds when empty.

Sealing Booklet

J. D. Malcolmson, director of Products development for Robert Gair Company, Inc., has completely revised the booklet on "Sealing of Corrugated and Solid Fibre Containers."

This is a complete revision of the standard work on this subject and this third edition is in entirely new format. It deals with container closures of all types, legal requirements for packing, hand and automatic sealing procedures, and various methods of sealing and strapping packages.

The booklet is free and may be had by writing to Robert Gair Company, Inc., 155 E. 44 St., New York.

Cesco Dumper

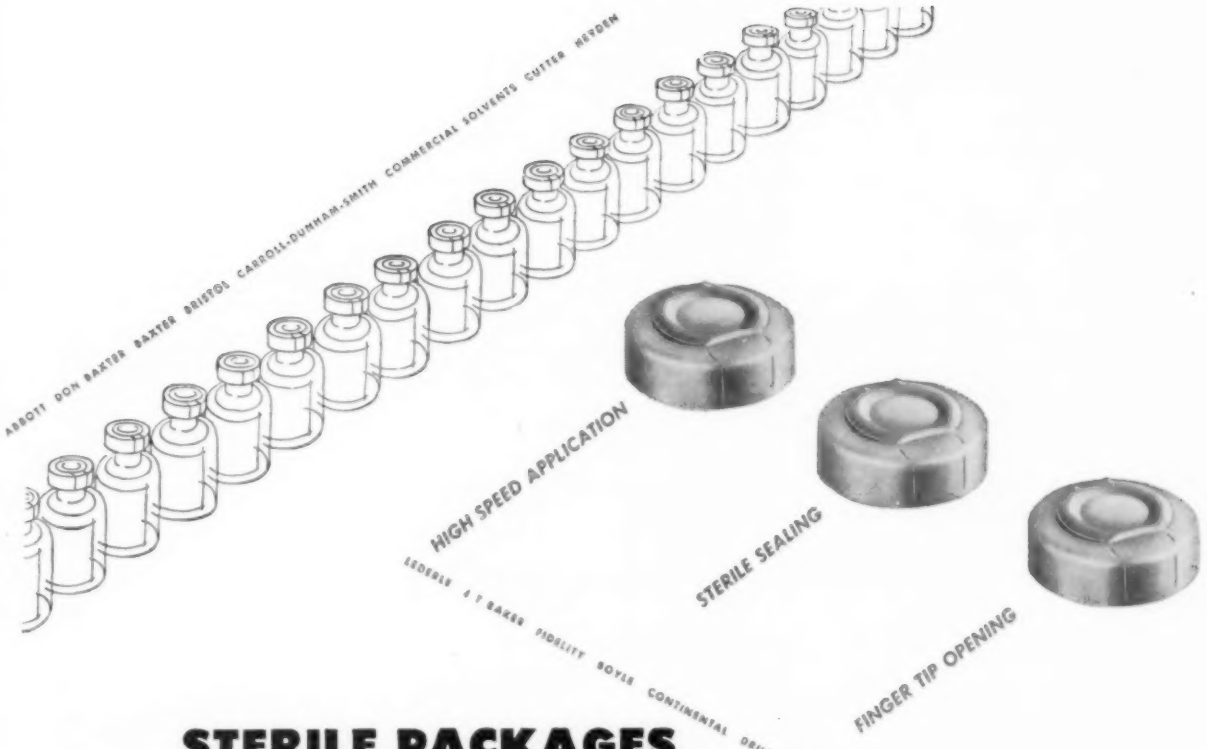
For lifting and dumping quantities of free flowing materials, the Colson Equipment & Supply, 1317 Willow St., Los Angeles, has announced the Cesco Dumper.

It is claimed that this dumper is a practical time and labor saving piece of equipment, adaptable to many different types of manufactures, processors and distributors. The dumper can be used for liquids, as well as solids and semi-solids such as chemicals, light industrial products, grit for tumblers, etc. The material is placed in the skip of the dumper, a switch is turned and the skip with its load is automatically lifted and emptied into bins, kettles or other receptacles.

The Cesco Dumper is equipped with a 500 pound capacity box type skip for loose materials or liquids, or an open front for bagged materials. Stainless steel skips may be had if desired. The open front skip contains spikes which the opened bag in place while lifting and dumping. The manufacturers claim that 100 trips an hour are possible, and as much as 600 cubic feet or 50,000 pounds may be lifted and dumped in that time.

The dumper requires a floor space of only 36 inches by 65 inches and is equipped with 5 inch ball bearing swivel casters so that it can be easily moved. Some of the features include a reversing drum control with Up,

Stop and Down positions, a solenoid operated brake which halts the motor instantly, preventing coasting, grooved hoisting drum that leads the cable in correctly, preventing piling up. There are no exposed gears, or belts, and simplicity in mechanism has been sought.


ABBOTT DON BAXTER BAXTER BRISTOL CARROLL-DUNHAM-SMITH COMMERCIAL SOLVENTS CUTTER HEYDEN
HIGH SPEED APPLICATION
STERILE SEALING
FINGER TIP OPENING
LEDERLE J T BAKER FIDELITY BOYLE CONTINENTAL DRUG PRODUCTS HARVEY-PITTENGER HORTON & CONVERSE PROCOL WYETH WINTHROP

STERILE PACKAGES BY THE MILLIONS

Economically applied at high speeds, adaptable to bottles of all sizes, Alseco Stericaps are the choice of leading pharmaceutical houses and manufacturing chemists. Doctors prefer them because they provide quick opening, ease of dispensability and continued protection for the products. If you package products that must be kept sterile, investigate Alseco Stericaps.

TAILOR MADE OF ALCOA ALUMINUM

ALSECO SEALS

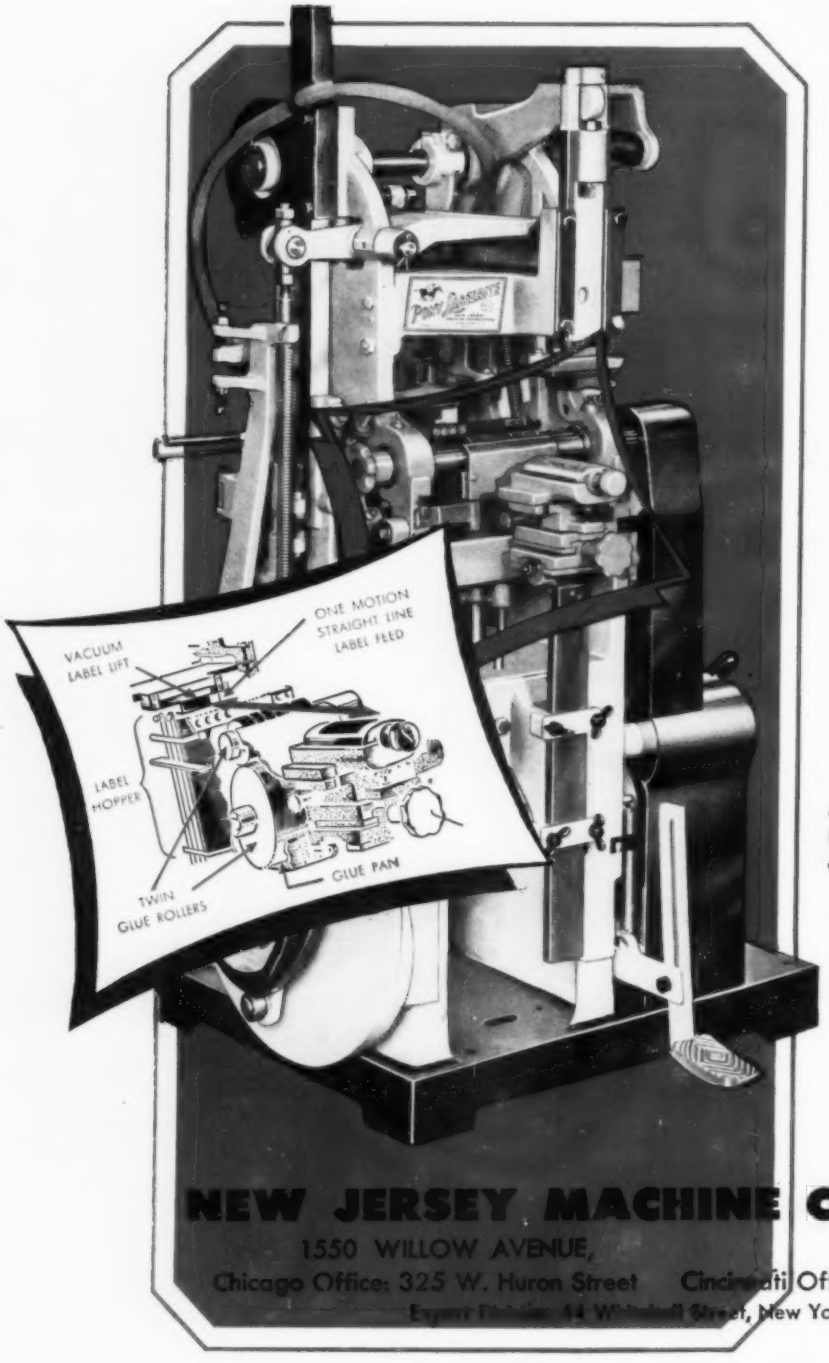
AND SEALING MACHINES

HOFFMAN LA ROCHE MOSPITAL LIQUI
LE ELI LILLY MAYO MERCK NOVOCAL PARKE-DAVIS PFIZER SCHENLEY SQUIBB FREDERICK STEARNS UPJOHN WARREN-TEED

ALUMINUM SEAL COMPANY • RICHMOND, INDIANA • SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

Labeling — on the PONY LABELRITE

gives you these 2 Outstanding Advantages:



1 "Air-tight" VACUUM label handling in one continuous stroke, *guarantees* perfect label registry.

2 Twin-roller method of glue applying, applies tissue-thin film of adhesive over full surface of label—and eliminates bottle wiping.

—

These two features alone lower the cost of labeling, and give you better looking results, because no inspection, wiping or retouching required.

★

Ask about ALL the reasons why the Pony Labelrite does better labeling, costs less to operate.

NEW JERSEY MACHINE CORPORATION

1550 WILLOW AVENUE, HOBOKEN, N. J.

Chicago Office: 325 W. Huron Street Cincinnati Office: 1701 Carew Tower

Export Division: 44 Whitehall Street, New York, N. Y.

Drum Handler

A drum carrier made by The Falstrom Company, Passaic, N. J., comes in very handy wherever drums are handled in a factory. The Drum-Karrier, as it is called, is a rugged, low-cost tool which makes an efficient drum handling system out of any monorail hoist, crane or chain fall.

The Karrier features one-man operation and fits all standard size drums. To use, the Drum Karrier is simply hooked onto the hoist, moved to position, clinched around the drum, and transported where needed. Positive tilt locks hold drum in vertical position and permit easy, controlled tilting to mix or dispense contents over receiving tank.

Pressure Filter

T. Shriver & Company, has come out with a pressure filter said to filter any fluid from the lightest, most volatile liquid to heavy slurries or viscous materials. Horizontal type filter plates permit building up a firm filter cake of uniform density on the plate surface, the horizontal plane prevents the cake from breaking or falling. The cart of filter plates is totally enclosed within a hermetically sealed tank with an easily clamped on cover.

The tank is made of all welded construction, with a smooth interior and dished bottom for easy drainage and cleaning. For further information write to T. Shriver & Company, Inc., 810 Hamilton St., Harrison, N. J.

Water Conditioning Handbook

New methods and apparatus for conditioning water and other liquids are described in a 60-page bulletin which has just been completed by Liquid Conditioning Corporation, manufacturers of equipment for water softening and clarification.

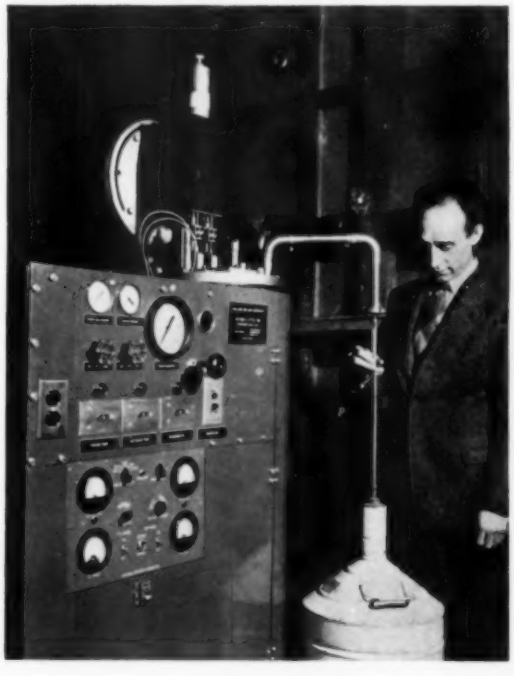
The bulletin is a revision of a previous publication, brought up to date to include the most recent developments in the design of water treatment and liquid conditioning equipment. Each of the many different types of water conditioning processes are described, advantages and limitations of each type are explained. Included in the bulletin are tables listing various kinds of gaseous and solid impurities, showing the effective limits of tolerance for various purposes, methods for removal and the residual amount of each impurity after treatment.

Plant executives and engineers can obtain copies by writing on company letterhead to Liquid Conditioning Corporation, Department DC, 114 East Price St., Linden, N. J., asking for bulletin G-1.

Low-Temperature Research Cryostat

Research laboratories can now undertake work at temperatures close to absolute zero as a result of the Collins Helium Cryostat, being manufactured by Arthur D. Little, Inc., Cambridge, Mass.

The device is a unit which liquifies helium and can maintain any temperature down to 2° Kelvin, or 456° below zero on the Fahrenheit scale.

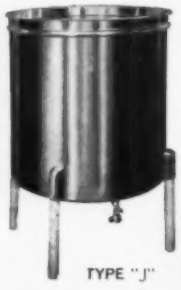


The cold space of the Collins-Helium Cryostat and part of the refrigerating equipment is contained within a steel jacket twelve inches in diameter and about five feet tall, which is housed in a cabinet measuring three by four feet. The complete unit weighs about 2800 pounds and occupies less than 50 square feet of floor space. Helium is the only refrigerant used.

Your MIXING or STORAGE PROBLEMS can be Solved with a STAINLESS STEEL SAN-I-TANK

TYPE "K"

Regardless of what your chemical storage or mixing problem is, a San-I-Tank can simplify it for you—economically and safely. All San-I-Tanks are built by tank specialists. Constructed throughout of 18-8 Stainless with all welds ground smooth and polished. Completely self-draining, sanitary and rust proof. Many extras available such as covers, motors, agitators, etc. Let our engineers give you recommendations on your tank problems.



TYPE "J"

MANY TANKS IN STOCK FOR IMMEDIATE SHIPMENT — *Tell Us Your Requirements.*

We carry a complete line of stock sizes in San-I-Tanks. If we do not have a Standard tank to fill your need our Engineering staff is at your disposal to design and build a tank best suited to your requirements. If it's a tank problem, get in touch with Metal-Glass today,—we can solve it for you.

DISTRICT OFFICES: 420 Lexington Ave.™ New York 17, N. Y. · 140 Walker Road Atlanta, Georgia · 605 Washington Blvd. Chicago, Illinois · 175 Thirteenth St. San Francisco, Calif. · 3236 Union Pacific Ave. Los Angeles 23, Calif.

METAL-GLASS PRODUCTS CO.
Dept. D BELDING, MICHIGAN

THE *"Sealed-Disc" Filter In Action*

for the dependable, uniform clarity and brilliance of *All Liquids*

A real space and time saver

"Sealed-Disc" Filters have proved their ability on extracts, drugs, chemicals, perfumes, cosmetic preparations, animal and vegetable oils and other similar liquids that require a fine degree of clarity without altering taste or color. Compactness and portability assures ease and speed in handling, air-tight construction prevents leakage and even evaporation. Available in Stainless Steel etc. with or without pumps in sizes from 1 g.p.m. to thousands of g.p.h. Write for our bulletin No. 745.

The Alsop Engineering Corporation
212 Cass Street Milldale, Conn.

ALSOP ENGINEERING CORPORATION
Filters, Filter Discs, Pumps, Tanks, Mixers, Agitators

ROSS CARTONING MACHINES are *Death on Downtime*

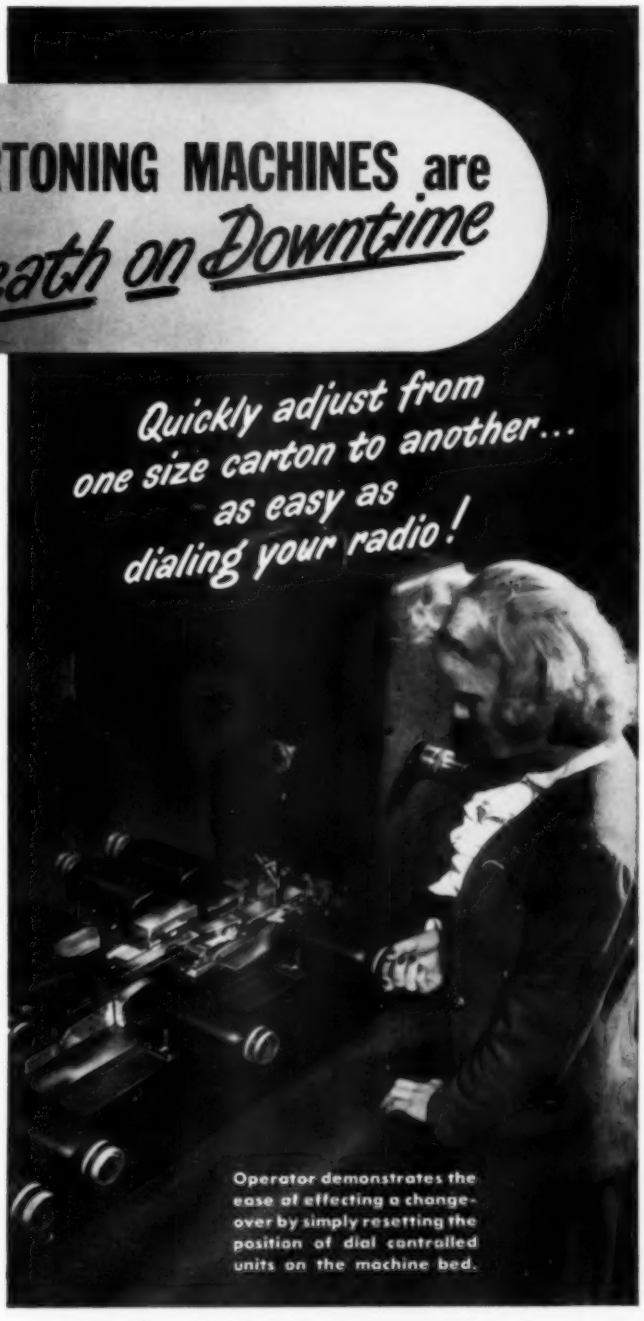
Ross cartoning machines can and do work 'round the clock—without the profit-eating penalty of excessive downtime while converting from one size cartoning operation to another.

For in the Ross design there are no parts to remove and replace when making a changeover. It's done by adjusting movable units that are permanently built into the machine bed. Adjustments for carton size are made against numbered scales guided by calibration charts supplied with each machine. Any semi-skilled operator can make the changeover in a few minutes time. The convenience, simplicity and flexibility of the Ross dial control method means money to you. It is an exclusive, patented feature.

Now's the time to get acquainted with the Ross way . . . the new and better way to mechanically handle all cartoning operations. *Use the coupon.*

ROSS CARTONING MACHINE

Ross cartoning machines are made in both semi-automatic and fully automatic types.



Operator demonstrates the ease of effecting a change-over by simply resetting the position of dial controlled units on the machine bed.

A. H. ROSS COMPANY, Inc.

PACKAGING MACHINERY

Subsidiary of Rockwell Manufacturing Company

P. O. Box 998 · Dayton 1, Ohio

Send this coupon today!

A-4

A. H. ROSS COMPANY, INC.
Box 998, Dayton 1, Ohio

Gentlemen:

Please send me without obligation your catalog and complete engineering and performance data on Ross cartoning machines.

COMPANY_____

STREET_____

CITY_____ ZONE_____ STATE_____

YOUR NAME_____

THE TIME IS HERE TO CUT PACKAGING COSTS and MEET GROWING COMPETITION!

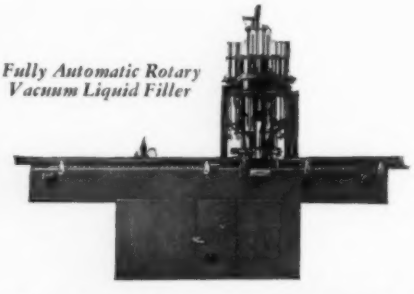
mrm *MACHINES WORK FOR LEADING PACKAGERS*

VERSATILE, ADAPTABLE FILLERS — For varied long, uninterrupted runs . . . at high speeds . . . for thin to foamy to viscous liquids . . . for *all* container types, sizes, mouth openings . . . yielding profitably high production quantities. PROMPT DELIVERIES!

For many years MRM has had outstanding experience in solving diverse *specific* filling problems. We are in close daily contact with the problems of all industries involving packaging. Our fillers are designed to operate with semi or fully automatic auxiliary equipment, and are built to give long life and *dependable service.*

Semi Automatic Vacuum Liquid Filler

Fully Automatic Rotary Vacuum Liquid Filler



- **MODERATELY PRICED TO REACH *ALL* MANUFACTURERS**
- ***NO SKILLED OPERATION OR MAINTENANCE NEEDED***
- **PARTS ARE SIMPLE—FEW—INEXPENSIVE**

CONSULT US ON YOUR PACKAGING PROBLEMS

mrm CO. INC. Dept. JCI 171
custom-designed and built fillers and conveyors
191-193 Berry Street, Brooklyn 11, N. Y.
EVergreen 7-3936

Here's what you'll like about the new

...“HAGERTY HANDY FILLER”

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

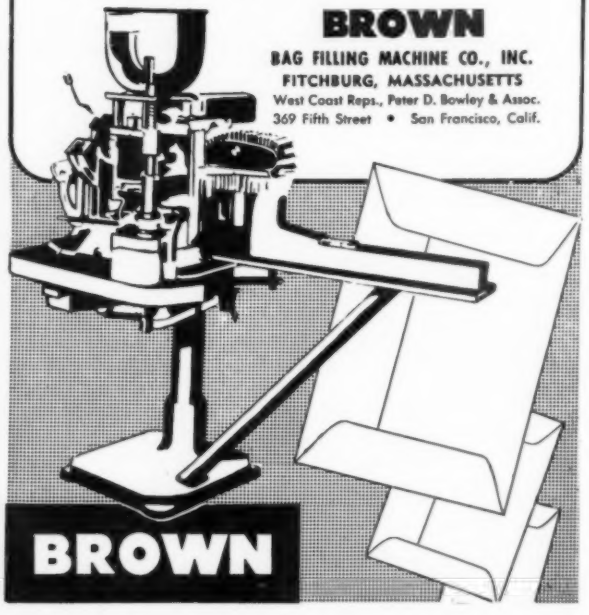
Write for illustrated folder and prices

HAGERTY BROS. & CO.
10 Platt Street **New York, N. Y.**
Est. 1849

Packeting! **GREATER SALES!**

Brown Automatic Packeting opens up entirely new avenues of distribution and sales. Brown equipment economically packets any dry, free flowing drug product — uniformly and with minimum filling losses. Inquire about Brown packeting — a packaging story in itself.

BROWN
BAG FILLING MACHINE CO., INC.
FITCHBURG, MASSACHUSETTS
West Coast Reps., Peter D. Bowley & Assoc.
369 Fifth Street • San Francisco, Calif.



Here's a better way to package POWDERS!

- *Automatic* **Filling**
- **More Production with less labor**
- **Guaranteed Accuracy**

TRIANGLE MODEL U-1 AUGER PACKER

NO more foot lever to fatigue the operator. The new Triangle Model U-1 Auger Packer automatically begins filling when the package is placed in position and stops when a predetermined amount is filled. The production is increased 15 to 25% over the previous foot lever model.

Fill your cans, cartons, bags or jars from 1 oz. to 5 lbs. with this machine at a rate of 20 to 30 per minute. Handles *any* powdered material and provides quick change-over to different products with a simple adjustment. WRITE TODAY FOR NEW BULLETIN SHOWING COMPLETE DETAILS!

NOTE: Due to increased production facilities these machines are now IMMEDIATELY AVAILABLE.

TRIANGLE PACKAGE MACHINERY CO.

929 NO. SPAULDING AVENUE, CHICAGO

Sales Offices: New York • San Francisco • Pittsburgh Memphis • Los Angeles • Dallas • Jacksonville

Branch Factory: Los Angeles.

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

EPPENBACH, INC.

45-10 Vernon Blvd., Long Island City 1, N. Y.

EPPENBACH INC.

Processing Equipment for Over 30 Years

HUBBERT

All Hubbert Kettle Shells are seamless, die drawn from one single sheet.
Shells have no welds to crack, corrode, contaminate or leak
Kettles — Tanks — Agitators — Valves
Special Equipment to *Your* Design in
Stainless Steel—Nickel—Monel

1. SEAMLESS SHELLS
2. SANITARY
3. EFFICIENT
4. SUPER QUALITY
5. SAFE
6. DURABLE

Hubbert Kettles built to ASME & CANADIAN Codes.
Request certificates when ordering.
B. H. HUBBERT AND SON, Inc. 1311 South Ponca Street, Baltimore 24, Md.

NEW EQUIPMENT

for Immediate Delivery

VACUUM FILLERS—8-10-12 SPOUTS
WILL FILL FROM 1 OUNCE TO 1 GALLON JARS OR BOTTLES — 45 to 60 PER MINUTE
STAINLESS STEEL SYPHON FILLERS
CHEM & PRO SLOW and HI-SPEED AGITATORS
CHEM & PRO POWDER MIXERS—up to 2000 lbs.
STAINLESS STEEL TANKS up to 500 gallons
CONVEYORS BUILT TO YOUR SPECIFICATIONS

Guaranteed Rebuilt Equipment

3—Mikro pulverizers—bantam size.
1—Mikro pulverizer—10 HP motor.
3—Day Lightnin fillers—Stokes Model G Filler.
1—Devine 20 shelf vacuum dryer—40" x 43" complete.
5—Stokes, Colton, Kux Lohner from ½" to 3½" tablet presses.
1—Ayres tablet counting machine—up to 1000.
10—Stainless steel clad kettles—30 to 100 gallon.
1—Perfectum ampule fillers from 1 to 10 CC and also a Perfectum sealer.
12—World, Ermold semi-automatic labelers.

Write for our latest bulletin containing over 500 items.

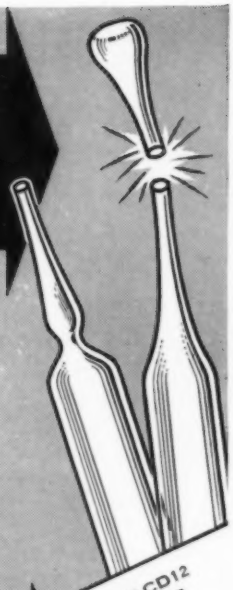
Chemical & Process Machinery Corp.
146 GRAND ST. WOrth 4-8130 NEW YORK 13, N. Y.

A NEW COLTON ROTARY TABLET PRESS
SERIES 200-25 ROTARY TABLET PRESS

The design of the Series 200-25 Tablet Machine is an outstanding engineering achievement, the culmination of years of experience in building tablet machines. This compact machine incorporates refinements that provide an entirely new standard of performance for this type of equipment.

ARTHUR COLTON COMPANY
2620 East Jefferson Established 1884 Detroit, 7, Mich.

All Coby Ampoules
are
"VACUUM FREE"
Before Snipping



Special process breaks vacuum in ampoule before snipping, to minimize the foreign particles and glass dust that may be sucked in when ampoule end is cut off.

Extensive line stocks all common sizes in both straight and constricted neck ampoules.

EXPERT GLASS BLOWERS SPECIALIZE IN COMPLETING ODD SIZES AND STYLES TO CUSTOMER'S SPECIFICATIONS.

WRITE DEPT. CD12 FOR DESCRIPTIVE CIRCULAR AND CURRENT CATALOG

THE COBY GLASS PRODUCTS COMPANY
ATTLEBORO, MASSACHUSETTS • U. S. A.

HORM FILTERS HORM ASBESTOS FILTER PADS

Horm Filters for filtration, clarification, polishing, are designed so that no liquid can by-pass the filter element. They are unsurpassed for drug, chemical and cosmetic preparations.

CLARIFLOW

STERILFLO

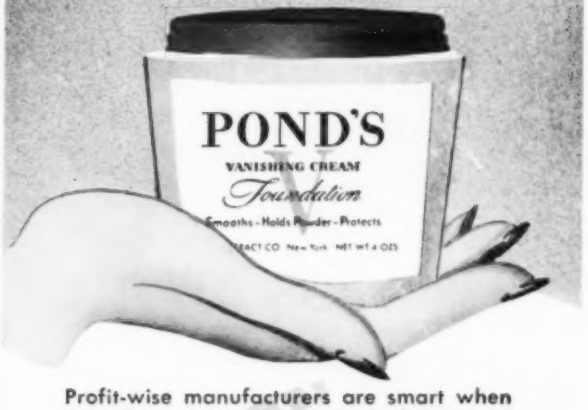
–No rubber washers used
–Adaptable to all types of filter mediums
–Rapid change of filter pads
–Construction Stainless Steel or Bronze (nickel plated)
–Suitable for coarse and fine filtration, including germproof and ultra-fine

HORM ASBESTOS FILTER PADS FOR EFFECTIVE FILTRATION

TRADE MARKS REG. U.S. PAT. OFF.

F. R. HORMANN & CO., Inc.
186 JORALEMAN ST., BROOKLYN 2, NEW YORK
Plant: 30 Sea Cliff Ave., Glen Cove, L. I.

PACKAGING FOR PROFITS!



Profit-wise manufacturers are smart when they figure cost-wise in their planning of proper packaging control . . . For you, "GEYER" Fillers do a job of 'packaging for profits.' • Designed to operate economically, these straight line, 'sweet running' Fillers with multiple cylinders maintain highest production quotas for any size and shape cosmetic or drug product. Slow moving parts assure long life, attachments can be shifted in a matter of seconds.

No matter your packaging needs—**CLEAN CUT OFF FILLING** for products that seek their own level or **BOTTOM UP FILLING** for semi-solids—"GEYER" does the job . . . No drip . . . Clean Filling . . . Entirely automatic . . . Maximum production assured.

GEYER
SINCE 1914

LEADING COSMETIC, DRUG & TOILETRY MFGRS. USE GEYER FILLING MACHINES

THE FILLER MACHINE CO. INC.
1249 E. MONTGOMERY AVE., PHILA., PA.

YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Trade-Mark Consultant

SINCE the day that the Lanham Act came into being, I have been bombarded with requests for information regarding marking your advertising matter, etc., with "Trade-Mark Registered U. S. Patent Office." Now, the matter keeps cropping up as a specific query (as well as a gripe). The question usually runs like this:

Why do I have to mark up my good (and expensive) advertising copy with this "Reg. U. S. Pat. Off." or even the R. in a circle you told me about? It spoils the copy—and looks like Hell!

Sorry, boys, but you just have to *if* you want all the benefits of the Lanham Act—and you sure do if you want to protect your trade-mark to the fullest extent. Let's look at it this way.

Registration of the Mark is Constructive Notice Only

Section 22 of the Trade-Mark Act of 1946 which we know best as the Lanham Act states clearly that registration of a mark shall be *constructive* notice of registrant's claim of ownership. This applies to marks registered under the old Act of 1905 as well as to marks registered under this 1946 Act. I went into the definition of this constructive notice in my June 1947 column. It is a hard thing to clearly define so perhaps a non-legal example will help.

Let's assume you have a new product to offer to the trade. You are going out of town to demonstrate it. You engage a demonstration room in a hotel. Perhaps a local paper picks up the news item, perhaps not, but you do nothing to advertise your presence. It's up to the other fellow to check if and when you'll be there to demontrate. You have done your part by first making reservations for your trip and then appearing to demonstrate. Not very good business, you say? Right! But it's a sort of equivalent of constructive notice, whereby registering your trade-mark you serve notice of your rights and the other fellow must check to see if he is clear of your mark. You have done all you are legally required to do.

Actual Notice That Your Trade-Mark is Registered is Good Business

Now let's go a step further. After engaging the room you give notice of your appearance. You tell the trade papers. No doubt you put a notice in the local newspaper and perhaps you send out a circular letter to interested parties. Good business? Right, and you can readily see that what you have done is serve *actual* notice on the public. So when you put "Registered Trade-Mark U. S. Patent Office" in any of its approved forms on your labels or advertising matter you are serving *actual* notice of your trade-mark rights and this, I assure you, is also "good business." The difference between relying only on constructive notice as given by your registration and giving actual notice as by advertising is the deciding factor of obtaining damages or not in a clear case of infringement.

With Actual Notice You Can Collect Damages

If you rely only on constructive notice which you automatically get when your mark becomes registered, should you sue for infringement you cannot claim damages unless the other party has had *actual* notice of your registration (Lanham Act Section 29). If you have served actual notice then you can ask for recompense for damages both done and implied, as well as your costs of the action. Since the Court has powers under Section 35 of the Lanham Act to assess damages *up to three times as much* as the actual damages, that is, direct profits, etc. of the defendant, you can readily see how this could result in quite a benefit to the successful party. The amount awarded is not meant as a penalty against the defendant but as compensation to you, the trade-mark owner.

From this, you will see why actual notice is of such value to you. Infringement suits, like all legal matters, are expensive to both parties, and such compensation may be quite helpful to the owner of the infringed trade-mark. Certainly, actual notice is good business.

That's fine as far as it goes but my advertisement is still messed up! Is there no easy way of marking?

Yes, there is! First, please bear in mind that the Act of 1946 does not exactly specify the type of "marking." You must use the trade-mark in association with the goods. It can be on the labels, on advertising cards accompanying the goods, on the cartons for the goods, on tags tied to the goods or in any other physical association. It follows, therefore, that the marking, whether "Trade-Mark Registered U. S. Patent Office" or any recognized abbre-

KOLMAR
protects and respects
SPECIAL FORMULAE

● Your special formula in Kolmar's hands is an inviolate trust. Exclusive production for you under such formula is unqualifiedly guaranteed.

Our Research Laboratories are constantly working on the further improvement of existing products and the development of interesting new ones. Such developments, under certain conditions, can originate formulae that may be exclusively yours. Kolmar's policy is one of friendly co-operation with its customers and the recognition of the customer's rights in the formula under which he operates. *Your interests are our interests—your aspirations and ambitions, our challenge.*

Kolmar is recognized as the world's largest producers of private label cosmetics exclusively . and as the world's largest manufacturers of Vanity Puffs.

Kolmar Products include Lipstick, Dry Rouge, Loose Face Powder, Cake Make-Up, Foundation Creams, Liquid Make-Up, Eye Shadow, Mascara, Lotions, Colognes, Perfumes and other cosmetics.

REPRESENTATIVES: M. C. BOYD, DOUGLAS HAGGERTY, THOMAS LA PRELLE, EMPIRE STATE BUILDING, ROOM 605, NEW YORK, N. Y.; WARREN M. CURRY, 350 NELSON STREET, S. W., ATLANTA 3, GA., NORMAN KOLE, 955 MERCHANDISE MART, CHICAGO, ILL; J. C. WEILER, K. A. HENRY, 8003 FORSYTHE BLVD., ST. LOUIS 5, MO.; R. F. G. BYINGTON, 1260 N. WESTERN AVE., LOS ANGELES, CALIF. RICHARD F. SPICKER, 419 WEST FIFTH ST., CINCINNATI, OHIO.

Kolmar LABORATORIES

PRIVATE LABEL COSMETICS EXCLUSIVELY

IN ADDITION TO OUR ELLENVILLE AND PORT JERVIS, N.Y., PLANTS, KOLMAR OPERATES TWO LARGE PLANTS IN MILWAUKEE, WIS., AND ONE IN HOLLYWOOD, CALIF. KOLMAR OF CANADA: WILCKENS CHEMICAL & COSMETIC LABORATORIES, LTD., 624 KING STREET WEST, TORONTO 1, CANADA

has an enviable reputation, having made a marked contribution to the success of so many perfumes, colognes and toiletries which contain alcohol.

It really removes the sharpness of alcohol odor and lets the fragrance come through.

If you aren't already using it, write us for a sample of Tonkaire and directions for use. You'll really be amazed at the results!

COMPAGNIE PARENTO

INCORPORATED

CROTON-ON-HUDSON, NEW YORK

NEW YORK • CHICAGO • DETROIT • LOS ANGELES • SAN FRANCISCO • SEATTLE
PHILADELPHIA • TORONTO • MONTREAL • LONDON, ENGLAND

viation of this, can be associated with the mark in any desired way as long as you serve actual notice that the mark is registered. If you have a small artistic label on a bottle of perfume, even R in a circle will look bad. But if you put the perfume in a cardboard container perhaps the marking can be put on the container together with the mark unobtrusively. Perhaps with your product you pack an instruction folder. You can easily put it on that. There is, however, one final way which is simple, effective and should solve many problems and that is advertisements in trade magazines.

Trade Magazine Advertising Can Solve Your Marking Problems

In the drug, cosmetic, perfume and allied industries there are a number of trade magazines, including "Beauty Fashion" and this magazine, which lend themselves to a reasonably priced medium of identifying your trade-marks as registered. It is a simple matter for you to periodically insert a page advertisement listing your registered marks with your goods and with appropriate wording to show those marks which are registered. No test has yet been made in Court of this question of marking and what is considered as sufficient for actual notice. It is obvious, however, that a periodical advice to the trade by means of a trade magazine advertisement serves on those who might be the ones to appropriate your mark accidentally or otherwise an actual notice of your ownership.

Use of the words "trade-mark registered U. S. Patent Office" in some form and in some association with your actual goods is highly recommended, and it can be done without too much disturbance of aesthetic values of your labels, etc. Coupling this with the periodic trade paper advertising, I feel that anyone adopting the plan would always be safe and in a position to actively pursue any infringer with complete confidence in the strength of his mark as far as the question of serving actual notice is involved.

Foreign Briefnotes

Australia

A recent decision of the High Court of Australia should be of great interest to American manufacturers.

O. T. Limited, a Victorian Company, had registered "8 UP" for "mineral and aerated waters" and The Seven Up Company of U. S. A. applied to rectify the Register by cancelling the trade-mark "8 UP" therefrom. The "8 UP" registration was dated 17th August 1939, and it was shown that "7 UP" had been used in U. S. A. and elsewhere, *but not in Australia*, before that date. It was also shown that O. T. Limited knew of the use of the trade-mark "7 UP" overseas. The decision of the court was, in effect:—

In the absence of fraud it is not unlawful for an Australian trader to become the registered proprietor of a trade-mark used by another trader on similar goods in a foreign country, provided that the mark has not been used in Australia or associated in the minds of the Australian public with the goods of the foreign trader.

The Court stated that advertising in Australia, sufficiently extensive to ensure that the foreign trade-mark had become associated with the goods of the foreign trader in the minds of the public, would constitute user. But it appears that it is essential to prove that that association had been effected prior to the date of the Australian registration.

Therefore, if you have an Australian trade-mark but are not actually using it in that country, an advertising campaign may be in order to prevent loss of rights to another party.

The Trade-Marks listed here are dated October 21, 1947 through November 11, 1947 inclusive.

ADAMCO—VI—M—519, 247
Peter Adamopoulos, (Adams Mfg. Co.), Haverhill, Mass.
Ser. Mar. 19, 1947 D. U. Dec. 1, 1946

ALICE LOU—VI—H—510,952
Eugene Lard Henderson (La Jean Prod. Co.), Meridian, Miss.
Ser. Oct. 16, 1946 D. U. 1928

ALYS MAUGHAN—VI—H—522,242
Alice Maughan (Alys Maughan), Pasadena, Calif.
Ser. May 12, 1947 D. U. Nov. 9, 1946

ANISSA J E N—VI—C—517,400
J. Carson Brantley (The Banna Co.), Salisbury, N. C.
Ser. Feb. 13, 1947 D. U. May 1946

APHRA—VI—ABCEHS—497,971
Harry Shapiro (Chemical Specialties Co.), New York, N. Y.
Ser. Mar. 9, 1946 D. U. February 1940

ARDENA FLUFFY MILK BATH PETALS—VI—A—521,990
Elizabeth Arden Sales Corp., New York, N. Y.
Ser. May 6, 1947 D. U. Jan. 14, 1946

ARDENA PAT-A-CREAM—VI—C—520,330
Elizabeth Arden Sales Corp., New York, N. Y.
Ser. Apr. 8, 1947 D. U. Sept. 3, 1946

AROFLASCO (and des.)—VI—M—522,451
Ernest J. Arn, Belleville, N. J.
Ser. May 15, 1947 D. U. Apr. 14, 1947

ARTIST NAIL COLOR—VI—E—513,725
Dermetics, Inc., New York, N. Y.
Ser. Dec. 5, 1946 D. U. Nov. 13, 1946

ATOMIC—VI—G—525,675
Ben Pickard, Chicago, Ill.
Ser. July 2, 1947 D. U. June 28, 1947

BAN-IT—VI—T—520,534
Joseph W. Smith, Chicago, Ill.
Ser. Apr. 11, 1947 D. U. Apr. 1, 1947

BANHILL—VI—C—517,260
Loran O'Bannon (The Bannon Co.), Columbus, Ohio
Ser. Feb. 10, 1947 D. U. Nov. 1, 1946

BEAUTYKOTE—VI—T—507,094
Beautykote Corp., Newark, N. J.
Ser. Aug. 9, 1946 D. U. July 12, 1946

BERNICE OF HOLLYWOOD—VI—BCDEH—524,206
Bernice M. Picchietti (Bernice of Hollywood Cosmetics), Chicago, Ill.
Ser. June 14, 1947 D. U. Mar. 22, 1947

BLUE ROSE—VI—ABCDH—525,603
Lanchere, Inc., Chicago, Ill.
Ser. July 2, 1947 D. U. Mar. 26, 1912

BOTANY—IV—AI—512,572
Botany Mills, Inc., Passaic, N. J.
Ser. Nov. 14, 1946 D. U. Sept. 6, 1939

BOTANY—VI—CHI—512,319
Botany Mills, Inc., Passaic, N. J.
Ser. Nov. 9, 1946 D. U. Aug. 8, 1939

BROOKS BROTHERS' "346" (and des.)—IV—I—507,231
Brooks Brothers, New York, N. Y.
Ser. Aug. 12, 1946 D. U. September 1940

CARAMBA—VI—BC—514,046
Harry D. Koenig, (Anre), New York, N. Y.
Ser. Dec. 11, 1946 D. U. December 1945

CHAT—IV—M—501,730
General Aniline & Film Corp., New York, N. Y.
Ser. May 9, 1946 D. U. Apr. 25, 1946

CHAT—IV—M—518,352
General Aniline & Film Corp., New York, N. Y.
Ser. Mar. 1, 1947 D. U. Dec. 26, 1946

COOL—VI—G—523,513
Madeline Elizabeth Cash (Madeline's), Canton, Ohio
Ser. June 4. 1947 D. U. October, 1934

CREME ROYALE—VI—C—513,240
Elmo Sales Corp., Philadelphia, Penn.
Ser. Nov. 26, 1946 D. U. Nov. 6, 1946

(*Continued on page 850*)

Now available
for the drug and cosmetic industries

COMPOUND G-4

$C_{13}H_{10}Cl_2O_2$ **BACTERICIDE AND FUNGICIDE** MOLECULAR WEIGHT 269

Nomenclature: bis (5-chloro-2-hydroxyphenyl) methane; Dihydroxydichlorodiphenylmethane.

Melting point: 172 to 175° C.

Color: White to slightly pink.

Odor: Faintly phenolic.

Bactericidal properties:

F. D. A. phenol coefficient 90 at 37.5° C. against Staphylococcus aureus.

F. D. A. phenol coefficient 110 at 20.0° C. against Eberthella typhosa.

A. O. A. C. phenol coefficient 50 at 20.0° C. against Trichophyton interdigitale.

Solubility: Soluble in alcohols, ketones, propylene glycol, vegetable oils, fixed alkalies. Insoluble in water.

Toxicity: Non-toxic and non-irritating.

Suggested uses: Compound G-4 can be used as the active ingredient in athlete's foot preparations, including powders, lotions and ointments, and in veterinary remedies for the treatment of ringworm infections; it can be utilized as a topical antiseptic for superficial wounds and in such cosmetic products as deodorant colognes and powders; and as a fungicide, it will prevent mold growth and act as a preservative in hair wave sets, lotions, cold creams, ointments and many other cosmetics.

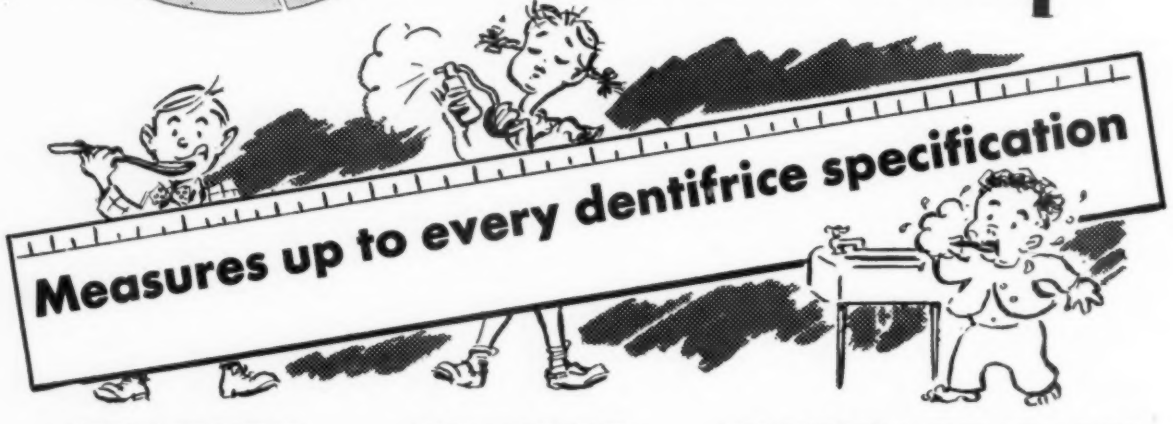
"BUY WISELY—BUY GIVAUDAN"

Givaudan-Delawanna INC.

Industrial Products Division · 330 West 42nd Street, New York 18, N. Y.

POWCO BRAND
REG. U.S. PAT. OFF.

Neutral Soap



NO TASTE NO ODOR PLENTY OF FOAM

Modern production methods and close selling margins make it possible for you to buy standardized, air-floated POWCO BRAND Pulverized Neutral Soap to suit your needs of better quality at a saving. Write today for your generous sample stating the use for which intended.

John Powell & Co., Inc. ONE PARK AVE., NEW YORK 16, N. Y.

Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

Patent Trends and Thoughts

There have been so many patents of interest which have been issued since the last appearance of this department that the present issue will be concerned practically entirely with those newly-issued patents. The only exception is a brief note on the present status of the litigation concerning the depilatory patent, U. S. P. 2,352,524. This case is believed to be of wide interest to the readers of this journal and for this reason an exception in its case has been made.

More on The Irma Patent

The attention of this department in the March, 1947, issue of this publication was directed almost exclusively to a consideration of the Imra patent (U.S.P. 2,352,524.) It will be recalled that Federal District Court Judge Coleman held in Maryland that SLEEK and NAIR infringed some of the claims of this patent, which was issued on an invention of Ralph L. Evans and Everett C. McDonough.

The previous article pointed out that Judge Coleman's decision might be upset upon appeal but in the meantime any one entertaining ideas of infringing the patent claims was taking chances.

It has just been learned that Judge Coleman's decision has been affirmed by the Fourth Circuit Court of Appeals. The printed decision is not yet available at this writing but it is understood that the upper court quoted extensively, with approval, from Judge Coleman's decision.

Those who were prepared to write off patents as a means of protecting an invention will be afforded much food for long winter evenings' thought by this depliatory case, which, it should be noted, was decided by an upper federal court inferior in status only to the U. S. Supreme Court itself. Somewhat in line with this case is one recently decided on a coin selector patent by another high federal court. The coin selector case will be discussed next month.

Circulatory Hormones

Winthrop recently obtained a patent (U.S. 2,424,401) on a circulatory hormone preparation said to exert a peripheral vasodilation when administered, intra-muscularly or orally, to man or animals.

The new preparation is derived from animal pancreas. It is extracted with a dilute aqueous alkaline solution and the extract then digested with trypsin.

Unlike prior preparations, the Winthrop one, according to the patent, is free from physiologically significant amounts of peptone, insulin, histamine, choline, etc. Moreover, the new preparation is said to be at least 25-40 times more potent than the best prior ones.

Of special interest is a new standard defined in the patent. The inventor stated that previous standards were not constant or reproducible. A unit, according to the patentee's yardstick, is the quantity of hormone which when injected intravenously into an atropinized dog under sodium barbital anesthesia will exactly counteract the pressor effect of a minimal hypertensive dose of epinephrine.

Aqueous, Non-Alcoholic Vanillin-Containing Flavoring Composition

A patent (U. S. P. 2,429,907) which should be of wide interest was recently obtained by Frederick J. Zimmermann and Maurice Kayner, and assigned to Salvo Chemical Corporation, Rothschild, Wisconsin.

The inventors first mention some disadvantages of alcohol-containing vanillin solutions, such as "too rapid volatilization during baking or at raised temperatures, high cost, and a flavoring capacity less and somewhat different than that desired or preferred, thus necessitating increased amounts of the extracts, still further increasing the cost and often resulting in impaired or substandard product flavors." Previous attempts to avoid these difficulties were said by the inventors to be unsuccessful since thay usually resulted in the conversion of the vanillin to sodium vanillin, which is said to be practically valueless as a flavoring agent, or involved the use of glycerine or other organic solvents, or the formation of vanillin derivatives, none of which succeeded in improving the situation.

The patentees avoid the disadvantages of prior compositions by making a composition containing from about 10-15 grams per liter of vanillin and up to 2 grams per liter of coumarin plus a small amount of the sodium salt of a dibasic or tribasic acid. The pH value of the composition is adjusted to range from 5 to 7 by means of small additions of an alkali such as sodium hydroxide or an acid such as citric acid. As buffer salts sodium phosphates, sodium citrate and sodium tartrate are used. Disodium acid phosphate is preferred. The buffer salts may be employed as such or may be formed in situ by the use of appropriate amounts of phosphoric acid, citric acid or tartaric acid with sodium hydroxide or equivalent.

DDT-Like Insecticides

The last appearance of this department carried an item about the DDT patent having been reissued twice. The Geigy firm has now obtained a U. S. patent 2,429,839, which covers compounds such as DDT which have had 1 molecule of hydrogen halide split off.

The dihalogeno-ethylene compounds covered by the latest patent in the DDT line are said to be superior in certain cases to the trihalogen-ethane compounds (e. g., DDT) as insecticides.

Medicinal Film-Forming Preparations

Dixon and Morgan, two American Cyanamid inventors, won a patent (U. S. P. 2,429,404) recently on a film-forming medicinal preparation containing a sulfonamide, an alkylolamine and a water soluble cellulose derivative. The patented composition is said to be useful in the treatment of a

Season's Greetings

Ph. Chaleyer Inc.

160 EAST 56th STREET—NEW YORK 22, N. Y.

HUISKING

SINCE 1910

CHEMICALS

Pharmaceutical—Industrial

DRUGS, OILS, VITAMINS, etc.

Import & Export Merchants

Buying Agents For Leading Foreign Houses

Selling Agents For American Producers

CAMPHOR USP Du Pont, *Powder — Tablets*
MENTHOL CRYSTALS USP
HYOSCINE HYDROBROMIDE USP
ARECOLINE HYDROBROMIDE, N.F.
SULFUR PRECIP., USP, *Sylvania Brand*
THEOBROMINE SODIUM SALYCILATE N.F.
OIL CAMPHOR WHITE SYNTHETIC
SULFA DRUGS
LYCOPODIUM USP
PAPAIN
SPERMACETI USP
HAARLEM OIL
QUINCE SEED
IRRADIATED ERGOSTEROL
SPANISH SAFFRON
CITRIC ACID USP, *Granular*
SUGAR OF MILK USP, *Powder*
BEESWAX USP *yellow & bleached*
LANOLIN USP *Hydrous & Anhydrous*
CALAMINE USP
CHLOROPHYLL
COPPER SULFATE *Crystals or Powder*
THEOBROMINE ALKALOID, *Pure*
CAFFEINE ALKALOID USP
CAFFEINE CITRATE USP

CHAS. L. HUISKING & CO., INC.

155 VARICK STREET, NEW YORK 13, N. Y.

Chicago Office 561 E. Illinois St. — Cable Address HUISKING, NEW YORK

LONDON AGENTS

Wheeler & Huisking, Ltd., 26 Great Tower St., London, E. C. 3, England

---

SINCE 1872

PEDER DEVOLD

PURE NORWEGIAN

COD LIVER OIL USP

"The Choice of Careful Bottlers Everywhere"

Standardized Vitamin Tested - Oils of All Potencies

FROM CAN TO CARLOAD QUANTITIES

HANDY, ATTRACTIVELY-LITHOGRAPHED CANS

The oil packed in 1 and 5 gallon cans is the finest, freshest, most palatable Medicinal Norwegian Cod Liver Oil available. The name Peder Devold has always stood for these qualities.

Vitamine Brand Oils (Fortified Poultry Cod Liver Oils)
Devold Vitamin A & D Feeding Oils
Vitamin A & D Concentrates
Irradiated Ergosterol (Vitamin D2)
Chlorophyll
Pure Wheat Germ Oil

IMPORT — EXPORT

PEDER DEVOLD OIL CO.

DIVISION OF CHAS. L. HUISKING & CO., INC.

155 Varick St. • New York 13, N. Y.

Cable Address: VITAMINE, New York — All Standard Codes

P.D.

SANTONIN

MEETING REQUIREMENTS OF INTERNATIONAL PHARMACOPOEIAS

ALKALOIDS of AMERICAN MANUFACTURE

SANTONINE COMPANY OF AMERICA

DIVISION OF CHAS. L. HUISKING & CO., INC.

155 VARICK STREET, NEW YORK 13, N. Y. — Cable Address SANTONICUS, N. Y.

wide range of infectious ailments, but is stated to be particularly well-suited for the treatment of burns.

The inventors point out that while sulfonamide compounds have been known to possess extremely desirable bacteriostatic action when applied externally to wounds, burns and the like, the use of aqueous solutions left something to be desired. In this connection it was noted that some cases required as much as three days of intermittent spraying with 2-sulfanilamido-pyrimidine-triethanolamine solution for eschar formation. In the treatment of burns early formation of a sterile eschar is generally conceded to be of primary importance. Eschar is a crust of dead tissue.

The new film-forming medicinal compositions are said to have the advantage that they can be produced in the form of a liquid suitable for application by spraying or in the form of a solid or semi-solid mass which can be applied by spreading and that in either case there results a relatively tough, pliable, elastic and protective film which is said to promote rapid healing and to inhibit infection. Another advantage is that the film is water soluble and therefore can readily be removed with water without discomfort or injury to the patient.

A specific example of one of the new compositions is given below as taken from the patent:

"A solution suitable for application by spraying containing 1.3% methyl cellulose (1500 cps.) 2.0% 2-sulfanilamido-pyrimidine, 5.3% triethanolamine and the remaining percentage as water is prepared by mixing, until homogeneous at room temperature, an aqueous dispersion of double the desired concentration of methyl cellulose with a solution of the desired concentration of 2-sulfanilamidopyrimidine and triethanolamine. This preparation, when applied to a burned area by spraying, resulted in the production of an eschar formation after one day. The film or eschar formed was transparent and pervious to additional 2-sulfanilamidopyrimidine-triethanolamine methyl cellulose solution."

Analgesics

Everyone is interested in relieving pain, especially when his own pain is concerned. The Smith, Kline and French Laboratories obtained a patent (U. S. 2427887) covering an analgesic composition of the antipyretic type.

By adding certain substances, known as sympathomimetic amines, to analgesics of the antipyretic type having no narcotic effect, Wallace, the inventor, states that a synergistic effect is obtained. He says that the amines, despite their lack of any recognized analgesic properties, markedly increase the analgesic effect and act to raise the threshold of pain over that obtainable with the given dose of the analgesic alone.

Analgesic ingredients contemplated in the patent composition include acetylsalicylic acid (aspirin), aminopyrine, acetanilid, and acetophenetidin.

Illustrative of the amines used are 1-phenyl-2-aminopropane, phenylisopropylmethylamine, optical isomers and non-toxic salts thereof, e. g., sulfates and hydrochlorides.

Generally speaking, the proportions of the ingredients as used in the compositions are:

Analgesic.....0.1 to 1.0 gram
Sympathomimetic amine or salt thereof.....2.5 to 40 mgm.

DDT

The Geigy people, who own the DDT patent rights, have actually obtained three different patents, up to the present time, on their DDT invention. The first patent, U. S. 2329074, was issued on September 7, 1943. This was reissued on December 4, 1945, as Reissue No. 22700. The latter was reissued on September 30, 1947, as Reissue No. 22922.

Before anyone might get the idea that this is a neat way to prolong the 17-year monopoly period, it should be pointed out that the reissues only correct certain matters in the original patent, but they do not operate to extend the term of the original patent. Thus, the second reissue obtained by Geigy expires 17 years from the date of the original patent, i.e., in 1960.

Other Patents

U. S. 2,427,578—**(Wisconsin Alumni Research Foundation)–3-Substituted 4-Hydroxycoumarins. Anticoagulants.**

U. S. 2,427,579—**(Wisconsin Alumni Research Foundation)—3, 4-Dihydropyranocoumarins. Anti-coagulants.**

U. S. 2,428,015—**(B. T. Bush, Inc.)—Esters of Valerolactone. Intermediates for biologically-active substances.**

U. S. 2,428,239—**(American Cyanamid)—Alkamine derivatives of Meta Aminomethyl Benzoic Acid. Local Anesthetics.**

U. S. 2,428,355—**Parke, Davis—Amino-substituted Acridines (e. g., 2-methoxy-6-chloro-9-(3′-diethylaminomethyl-4′-hydroxyphenylamino)-acridine dihydrochloride.**

U. S. 2,428,535—**National Drug—Ethyl Ester of Acetyl Mandelyl-Beta-Alanide. Urinary antiseptic.**

U. S. 2,428,805—**Eli Lilly-Dioxolanes—e. g., 2-methyl-4-(beta-hydroxy ethoxymethyl)-1, 3-dioxolane. Disinfectants.**

U. S. 2,428,978—**Geigy Basic derivatives of Alpha-Substituted Aryloxy, Acetic Acids. Have good spasmolytical efficacy and musculotropic, papaverine-like effects as well as a neurotropic activity of the kind of atropine.**

U. S. 2,428,955—**American Cyanamid—Alpha-Halo, Beta-Oxy Suberic Acid and Esters. Biotin intermediates.**

U. S. 2,429,095—**U. S. Rubber—Primary Aminoaryl Mercaptans, etc. as Fungicides.**

U. S. 2,429,096—**U. S. Rubber—Pyridine-2-Thiol and 2, 2′-Dithiodipyridine as Fungicides.**

U. S. 2,429,097—**U. S. Rubber—N, N′-Dithiodimorpholine as a Fungicide.**

U. S. 2,429,098—**U. S. Rubber—1-Phenyl-2-Piperonylidene-Hydrazine as a Fungicide.**

U. S. 2,429,099—**U. S. Rubber—Benzoquinone Mono-Oxime Semi-carbozone as a Fungicide.**

U. S. 2,429,102—**Mead Corp.—Esters of Lignin Material.**

U. S. 2,429,135—**M. M. Newman—Hair Curler.**

U. S. 2,429,171—**Ciba—Betaine derivatives of, e. g., Menthol, Vitamin A, Vitamin E.**

U. S. 2,429,176—**E. L. Watson—Hair Curler.**

U. S. 2,429,184—**Ciba—Process of Making p-Aminobenzene-Sulphona-mido-pyrimidines.**

Reissue 22,930—**Givaudan-Delawanna—Tertiary-butyl derivative of hemimellitene. Intermediate for synthetic musk.**

U. S. 2,429,207—**Giegy—p-Aminobenzene-sulphonamides.**

U. S. 2,429,244—**Hoffman-LaRoche-l-d-Ribityl-amino-3, 4-xylol.**

U.S. 2,429,275—**American Cyanamid—Alkamine Derivatives of Orthoaminomethyl Benzoic Acid, e. g., a beta-diethylaminoethyl-o-diethylamino-methyl benzoate. Local anesthetics.**

KESSCO PRODUCTS

CHEMICAL SPECIALTIES

KESSCO WAX "A-21"

ACID EMULSIFIER

FOR

ANTI-PERSPIRANTS and DEODORANTS

BUTYL STEARATE DIGLYCOL STEARATE

GLYCERYL MONO STEARATE

PROPYLENE GLYCOL MONO STEARATE

FOR USE IN

COSMETICS • PHARMACEUTICALS • ALLIED TRADES

KESSLER CHEMICAL CO., INC.

ESTABLISHED 1921

STATE ROAD and COTTMAN AVE., PHILADELPHIA 35, PA.

New! Outstanding!

AMERCHOL L-101

A LIQUID CHOLESTEROL EMULSIFIER PROVIDING UNUSUAL SKIN BENEFITS

NON-IONIC CHOLESTEROL in its most active and efficient form.

- Emollient, completely stable.
- For oil-in-water and water-in-oil creams, ointments and lotions.

AMERCHOL L-101 is one of many new Amerchols manufactured from specially processed Cholesterol and other sterols and will help you improve your products.

Our research laboratories are available to you for advice and information.

AMERICAN CHOLESTEROL PRODUCTS

Incorporated

MILLTOWN, NEW JERSEY

Sales Office—40 Exchange Place—New York 5, N. Y.

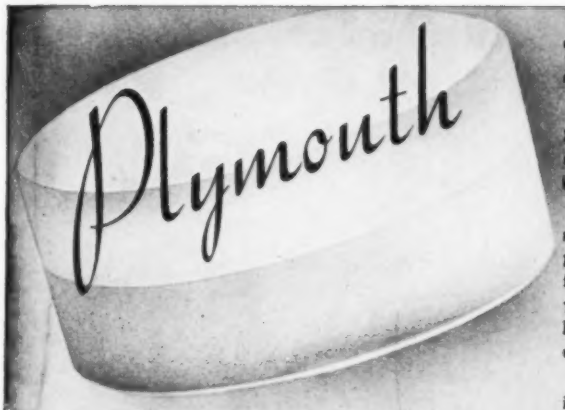
CRYSTACLEAR

REG. U. S. PAT. OFF.

Makes crystal clear solutions THAT STAY CLEAR INDEFINITELY without filtering . . . can be dissolved in distilled water alone or if you wish 25% alcohol can be added. State odor preference.

ALBERT 515 South Fairfax Ave

ALBEK, INC. Los Angeles 36, Calif.



POWDER BASE NO. 7

Since the introduction of this new face powder material sales of it have constantly increased because the use of it actually represents a development in fine face powders.

Its exceptional silky, soft, smoothness, the complete absence of odor and the extremely fine particle size of it, plus its extraordinary adhesiveness actually improves a face powder in which it is used. As little as 5% added to your formula will bring about this result although it is being used in some face powder to the extent of 15% and a formula is offered showing its use in this percentage.

Samples are at your disposal and we believe that this is one of the Plymouth products which warrants a serious investigation by every face powder manufacturer because it has real merit and will improve your product.

A COMPLETE LINE OF COSMETIC RAW MATERIALS

PLYMOUTH BOARD

M. W. PARSONS

Imports AND

PLYMOUTH ORGANIC LABORATORIES, Inc.

59 BEEKMAN STREET
NEW YORK, N. Y., U. S. A.

TELEPHONE: BEEKMAN 3-3162 — 3163 — 3164
CABLE ADDRESS: PARSONOILS, NEW YORK

Available From Stock

ALOES, Venezuelan
ANISE SEED, Star, Chinese
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CELERY SEED
CHAULMOOGRA OIL
CLOVES, Zanzibar
COCILLANA BARK
COLOCYNTH PULP
CORIANDER OIL AND SEED
CUMIN SEED
ERGOT OF RYE
FENNEL SEED, Indian, Argentine
FOENUGREEK SEED
GRAINS OF PARADISE
GUM GAMBAGE
GUM KARAYA
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES, Italian
KAMALA POWDER
KOLA NUTS
LAUREL LEAVES
LAVENDER FLOWERS
LICORICE ROOT
LINDEN FLOWERS, with Leaves
MAHUANG, Chinese
MARJORAM LEAVES
OAK MOSS
ORANGE OIL, Florida and Brazilian
ORRIS ROOT
PARSLEY SEED
PSYLLIUM SEED AND HUSKS
RHUBARB ROOT, Chinese Powdered and Whole
ROSEMARY LEAVES
SAGE LEAVES, Dalmatian, Spanish, Cyprus
SARSAPARILLA ROOT
SAVORY
SESAME SEED, Hulled and Natural
STRAMONIUM LEAVES
THYME LEAVES & OIL
UVA URSA LEAVES
VALERIAN ROOT

●

AMINOPHYLLINE
BARBITAL
EHPEDRINE SALTS
GUM CAMPHOR, Japanese and Domestic
ICHTHAMMOL, N.F.
VITAMIN PRODUCTS

• Other Imports Arriving Daily. • We Offer a Complete Line of Pharmaceutical Pills, Tablets, Liquids and Ointments.
• ALL ORDERS AND INQUIRIES GIVEN IMMEDIATE ATTENTION

KACHURIN DRUG COMPANY

Manufacturers • *Importers* • *Exporters* • *Distributors*

DRUGS - CHEMICALS - OILS - BOTANICALS

525 West 43rd Street, New York, N. Y.

Telephones: BRyant 9-7100-1-2-3-4 • *Cable Address:* Kachurin, New York • *Codes:* A. B. C. 5th & 6th Edition and Bentley's

Compounder's Corner

Glass Particles in Ampules

In an effort to improve the quality of ampule preparations, studies have been made from time to time to determine the nature of contaminants found in ampules discarded after routine manufacturing inspection. It was ascertained that many of these ampules were discarded because of the presence of glass particles which range in size from less than one micron to those visible to the unaided eye. In view of the fact that many physicians are of the opinion that a glass particle injected intravenously would serve as an embolus, regardless of size, an in vitro *and* in vivo *study of glass particles in ampules was made by J. H. Brewer and J. H. F. Dunning,* (J.A.Ph.A. 36:289, 1947). *They felt that it was important to determine the significance of these particles, for it has been observed that it is practically impossible to prepare ampule solutions in glass and to sterilize by autoclaving without producing some glass contamination. From a common sense viewpoint, it was believed advisable to determine at what level glass contamination in ampule solutions might be expected to be harmful. Solutions containing various sizes of glass particles were prepared and these suspensions have been injected intravenously in animals in varying amounts and over time periods extending to almost one year. These animals have been sacrificed, and chemical, histological, and pathological studies have been made. In addition, more than one thousand animals have been injected with concentrated residues obtained from ampules rejected because of particle contamination covering a period of some months of manufacture.*

As a result of their numerous observations, Brewer and Dunning are of the opinion that the ampule manufacturer who meets the present requirements of producing ampules substantially free from glass particles which can be seen with the unaided eye need have no fear that his product on injection would cause a fatal embolism, even though an occasional particle falls into the solution on breaking open the ampule. Furthermore, repeated injection of occasional particles will not give rise to pathology which could be considered dangerous. They warn, however, against processes of manufacture such as grinding, colloidizing, or rapid temperature shock which might produce large quantities of ultra fine glass of less than 1 micron without instituting filtration procedures for removing it. Simple filtration through hard paper is not sufficient to remove such particles. Several types of filters satisfactory for bacterial removal are efficient for this purpose and should be used, although the material is subsequently sterilized by other means.

In summarizing, Brewer and Dunning point out that, without attempting to be exhaustive, they have tried to prove that occasional particle contamination of ampule preparations produces no significant pathology in animals. They found that truly massive doses are required to produce any pathological reaction in rabbits. They reason, therefore, that by careful ampule processing, the dangers inherent in particle contamination can be largely eliminated.

Antioxidants for Vitamin A

The potentialities of vegetable oil concentrates as antioxidants for vitamin A in fish liver oils is indicated by L. O. Buxton in a report in *Industrial and Engineering Chemistry* (39:1171, 1947). Stability data on antioxidant concentrates, prepared from crude wheat germ, corn germ, and soybean oils by solvent extraction and tested in crude and carbon-treated soup-fin shark liver and halibut liver oils, establish that such concentrates are highly effective antioxidants for inhibiting peroxidation and vitamin A destruction in such type oils. In all cases, and for the same percentage of vitamin A destruction, much lower peroxide numbers were observed in the oils containing the vegetable oil antioxidant concentrates than in the blank crude fish liver oils or carbon-treated oils. The crude vegetable oils, when tested under similar conditions, displayed only minor powers to inhibit peroxidation and vitamin A destruction. The solvent-insoluble residual fractions, even though exhibiting no antioxidant activity for inhibiting vitamin A destruction in the carbon-treated halibut liver oil, displayed greater activity for inhibiting peroxidation than the crude vegetable oils themselves.

Dye Solution for Trench Mouth

According to an item in The Practitioner (*158:87, 1947*), *the local treatment of Vincent's gingivitis (trench mouth, ulcero-membranous gingivitis) consists in irrigating the affected area with hydrogen peroxide and drying it with cotton. After this, a pledget of cotton, soaked in the following solution, is pressed against the tooth so that the expressed liquid will flow around the tooth and enter any pockets or crevices:*

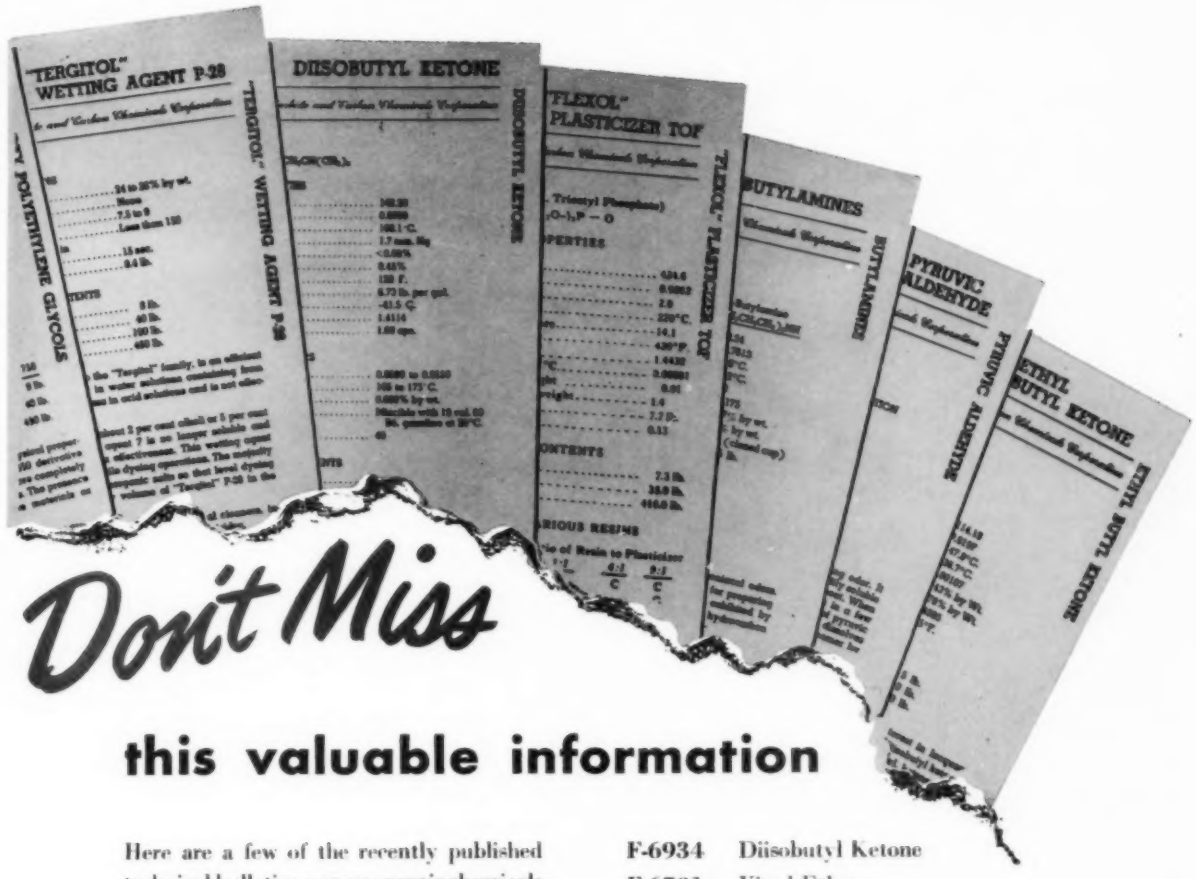
Crystal violet	**0.5 Gm.**
Brilliant green	**0.5 "**
Alcohol	**50.0 cc.**
Water	**50.0 cc.**

European Beauty Masks

In the new Belgian publication, *Alchimist* (1:263, 1947), F. Winter offers some comments on the use and preparation of beauty masks. In order to obtain good results when using beauty masks, it is essential to apply the mask when the muscles of the face are at complete rest and this relaxation should last as long as the mask is in contact with the face. Of course, the face must be previously washed and thoroughly cleaned. As a rule, the mask paste has a local hyperemic, stimulating and absorbing action which is coupled with more or less abundant sweating. The intensity of the absorbing action depends mainly on the mixed powdered materials used in the base. In many cases, the application of a mask is intended mainly for opening the pores and softening the skin with a view to more definite treatment with creams and other preparations.

As regards consistency of the paste, Winter is of the opinion, that the product should be sufficiently liquid in order that it may be easily applied on the face by means of a brush. Usually the contact lasts for one hour, sometimes longer. Four formulas of powder bases for making clay masks are given as follows:

1.	**Common kaolin**	**100**
	Talc	**20**
	Titanium bioxide	**5**
2.	**Common kaolin**	**75**
	Colliodal kaolin	**25**
	Talc	**25**
	Zinc oxide	**5**

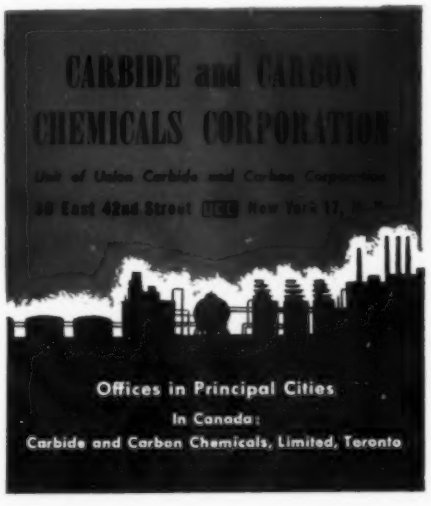


Don't Miss

this valuable information

Here are a few of the recently published technical bulletins on new organic chemicals developed by Carbide. Each of these bulletins contains helpful data and indications of uses that are potentially profitable to you. These technical bulletins should be a part of your permanent file on organic chemicals. If you have not received copies of all these bulletins, why not fill in the coupon below?

F-6934	Diisobutyl Ketone
F-6701	Vinyl Ethers
F-6159	"Flexol" Plasticizer TOF
F-6736	Methoxy Polyethylene Glycols
F-6823	Pyruvic Aldehyde
F-6860	Propylenediamine
F-6871	Butylamines
F-6906	"Tergitol" Wetting Agent P-28
F-6918	Ethyl Butyl Ketone


CARBIDE and CARBON CHEMICALS CORPORATION
Unit of Union Carbide and Carbon Corporation
30 East 42nd Street New York 17, N. Y.
Offices in Principal Cities
In Canada:
Carbide and Carbon Chemicals, Limited, Toronto

"Flexol" and "Tergitol" are registered trade-marks of C&CCC

Circle form numbers of literature you want—
and send the coupon to:

CARBIDE AND CARBON CHEMICALS CORPORATION
30 EAST 42ND STREET, NEW YORK 17, N. Y.

F-6934 F-6701 F-6159 F-6736 F-6823
F-6860 F-6871 F-6906 F-6918

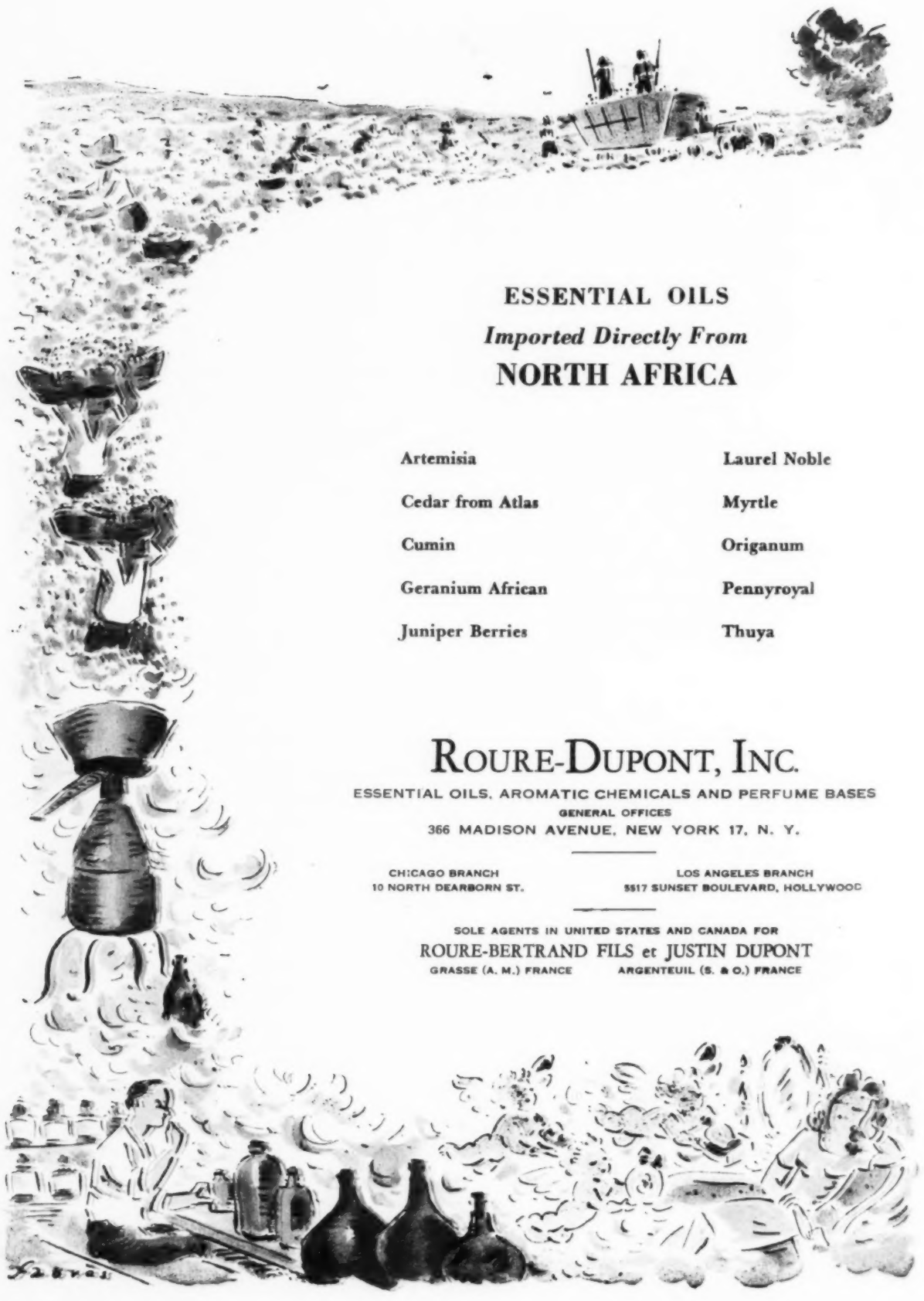
NAME _____

COMPANY _____

ADDRESS _____

TITLE _____

A-12



ESSENTIAL OILS

Imported Directly From

NORTH AFRICA

Artemisia	Laurel Noble
Cedar from Atlas	Myrtle
Cumin	Origanum
Geranium African	Pennyroyal
Juniper Berries	Thuya

ROURE-DUPONT, INC.

ESSENTIAL OILS, AROMATIC CHEMICALS AND PERFUME BASES

GENERAL OFFICES
366 MADISON AVENUE, NEW YORK 17, N. Y.

CHICAGO BRANCH
10 NORTH DEARBORN ST.

LOS ANGELES BRANCH
5517 SUNSET BOULEVARD, HOLLYWOOD

SOLE AGENTS IN UNITED STATES AND CANADA FOR
ROURE-BERTRAND FILS et JUSTIN DUPONT
GRASSE (A. M.) FRANCE ARGENTEUIL (S. & O.) FRANCE

3.	**Colloidal kaolin**	40
	Common kaolin	25
	Talc	15
	Starch	10
	Zinc oxide	6
	Titanium bioxide	4
4.	**Common kaolin**	50
	Colloidal kaolin	30
	Talc	20
	Titanium bioxide	3
	Very light magnesium carbonate	2

Two formulas for making compounded pastes are also given. The first calls for:

Common kaolin	100.00
Talc	20.00
Camphor	0.10-0.20
Menthol	0.05
Tragacanth, powdered	1.00
Cold Cream	5.00
Beauty milk	10.00
Boracic water	15.00
Decoction of marshmallow root, to make a paste	sufficient

The second formula employs the following materials:

Common kaolin	80.0
Talc	10.0
Very light magnesium carbonate	2.0
Titanium dioxide	3.0
Starch	5.0
Camphor	0.1
Dextrine	2.0
Hydrophyllic oil	5.0
Water, to form the paste	sufficient

Barrier Creams

Skin protective creams, or barrier creams as they are known in England, have become important aids in the prevention of industrial dermatitis. According to S. J. Hopkins (Manuf. Chem. & Manuf. Perf. 18:389, 1947), *to be effective, such protective applications must possess certain fundamental properties, among which the following are important: (a) Ease of application, (b) good adherence to the skin, (c) freedom from irritant properties, (d) easy removal from the skin when desired, and (e) esthetically acceptable. The formulation of the cream must also be considered in relation to the nature of the irritant against which protection is sought. For example, where degreasing agents are to be encountered, a fatty base is indicated, or the pH of the liquids dealt with may call for the inclusion of acid or alkaline constituents. This problem of formulation has been studied by many workers and a number of preparations have been developed.*

For example, the sample vanishing cream type of compound has chiefly a mechanical action, hindering absorption by filling up the pores with soap. This film of soap facilitates subsequent removal of irritants simply by washing, and from this standpoint has much to recommend it. A simple, basic formula is:

Stearic acid	20
Sodium carbonate	5
Glycerin	4-8
Water, to make	100

Fatty preparations have a similar mechanical action, but it may be necessary to incorporate a detergent in the cream in order to facilitate subsequent removal. A basic formula is as follows:

White wax	10
Wool fat	5
Sulfonated	10
Soft paraffin, to make	100

A small proportion of glyceryl monostearate can be incorporated with advantage, and the addition of some 5% of latex promotes the formation of a tough and flexible film when applied to the skin. Preparations of this type are of particular value when protection is necessary against prolonged contact with water.

The so-called "invisible gloves" are designed to coat the skin with a protective film and may be made as lotions, creams or ointments. They can be formulated to have water-miscible or water-repelling properties as required, and from time to time this kind of preparation has enjoyed great popularity. They are very effective for short periods, but have the great disadvantage that perspiration tends to loosen the protective coating, although careful formulation can reduce this drawback. When a water-resistant preparation is required, a useful basic formula is:

Gum benzoin	5.0
Beeswax	1.5
Lanolin	7.5
Mastic	2.0
Alcohol, to make	100.0

Alternatively, one of the newer cellulose derivatives such as ethyl or methyl cellulose may be employed, although some plasticizer may be required in order to give a sufficiently flexible film—e.g.:

Ethyl cellulose	4
Gum mastic	6
Castor oil	1-2
Acetone or benzene, to make	100

The use of polyvinyl alcohol in the formulation of preparations of this type is also worth investigation.

For a water-miscible compound a simple mucilaginous preparation is quite effective, but more recently the use of alginates, particularly in conjunction with an emulsifying base such as triethanolamine, has given excellent results. The creams made along these lines give more flexible films than those made with mucilages, and adhere better to the skin. A vanishing cream base may also be used and this has advantages if a large proportion of powder is to be incorporated. An illustrative formula is as follows:

Gum benzoin	5
Zinc oxide	10
Titanium dioxide	10
Alcohol	5
Cream base, to make	100

Protective preparations with a neutralizing action are usually designed to give protection against a particular type of irritant. Thus an acid such as boric or benzoic acid may be included when alkaline working conditions must be considered and if protection is sought against acids, the inclusion of aluminium or magnesium hydroxides or phosphates is indicated.

A a number of substances have been reported from time to time as the cause of photosensitization, particularly coal tar and its derivatives, and various fractions of oil distillates. Usually the ointments and creams with a protective action against photosynthetic agents offer simply a mechanical protection, but certain wartime experiments on methods of preventing sunburn open up a new approach to the problem. A typical product may be formulated thus:

Bentonite	5
Titanium dioxide	5
Wool alcohols	10
Soft paraffin	30
Water, to make	100

Wartime experience showed that ordinary crude red petroleum jelly had a definite protective action against sunburn, and that the addition of 10% of phenyl salicylate to the purer forms of petroleum jelly was also very effective. The possibility of improving industrial methods of protection against photosensitization along these lines is now being explored.

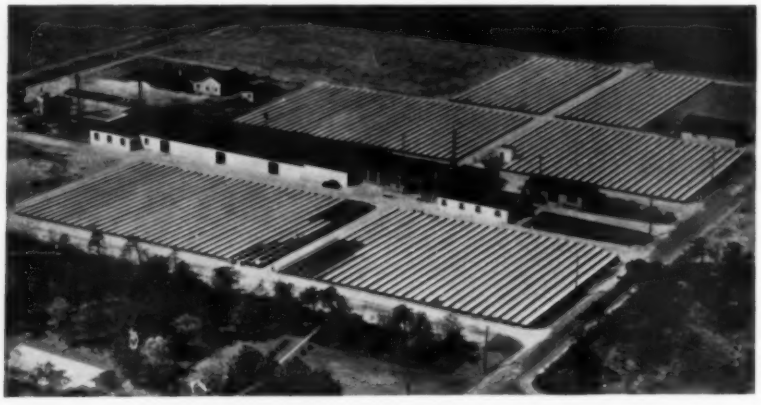
Hopkins also notes that, while barrier creams have a definite place and value in industry, the advantages of simple but thorough washing with soap and water are often overlooked. This is an important point, because unless proper emphasis is laid upon personal hygiene, recourse will be made to the use of barrier creams and similar preparations before it is really necessary. To this end it is essential to provide adequate washing facilities, together with a supply of a suitable soap. A good industrial soap should be superfatted, and have a small amount of some wetting agent to assist spread of the lather. The use of harsh abrasives should not be tolerated.

KOSTER KEUNEN

★

BEESWAX

U. S. P. Pure Sunbleached
U.S.P. Pure Yellow Refined



Office and Refinery: Sayville, N. Y.

MICRO-CRYSTALLINE PETROLEUM WAXES

OZOKERITE • SPECIAL WAX BLENDS • CERESINE

Ask for samples, prices and technical data

KOSTER KEUNEN . . . . SAYVILLE, N. Y.

PHONE: SAYVILLE 400

BENJ. FRENCH, INC.

ESSENTIAL OILS -- AROMATIC CHEMICALS

DESCOLLONGES
PRODUCTS

JASMAROME

A new synthetic Jasmin which reproduces to a remarkable degree the true odor of Natural Jasmin Oils extracted from pomade washings. This new product gives splendid results, used with the natural or to replace it entirely. Write for sample or trial quantity.

160 Fifth Avenue *New York 10, New York*

ADVANCING THERAPY

Intestinal Extract in Rheumatic Diseases

Having found that atrophy of the small intestine was often severe in patients with rheumatic disorders, A. Renshaw (*Ann. Rheumatic Dis.* 6:15, 1947) decided to test the effect of extract of intestinal mucosa. Enzyme specialists agreed to prepare an extract of intestinal mucosa rich in erepsin. The resulting product was presented in enteric coated capsules for oral administration. These were designed to release their contents one hour after being swallowed. Since the hydrochloric acid of the gastric juice would inactivate the enzymes, an interval of two and a half hours after food seemed to be the optimal time for administration; this would allow the intact capsule to pass into the duodenum, there to dissolve and liberate its contents for subsequent action in an alkaline medium. Treatment of patients with this extract have now been proceeding for seven years. Most types of rheumatic disease have been treated—rheumatoid arthritis, osteoarthritis, fibrositis, synovitis, intermittent hydrarthrosis, acute and subacute rheumatism and spondylitis. Among over 700 cases treated by the Renshaw, good results have been obtained in rheumatoid arthritis, osteoarthritis and fibrositis. Also some intractable cases of ankylosing spondylitis and Still's disease have responded to this therapy. The beneficial effects observed as a result of the administration of the intestinal extract in various rheumatic conditions would appear to indicate a common factor underlying all and to support the idea of a rheumatic diathesis.

Polyethylene in Surgery

There is a great variety of plastic materials available to industry, but only a small number of these can be used within the human body. Up to the present time, no plastic material which can be formed into pliable tubing as a substitute for rubber or into thin film to replace normal membranes in the body has been found. Experiments described by F. D. Ingraham, E. Alexander, Jr. and D. D. Matson (*J.A.M.A.* 135:82, 1947) suggest that the synthetic plastic material, polyethylene ("polythene") in the form of tubing or film can be implanted safely in the tissues, provided pure polyethylene is used. Animal experimentation with this plastic has shown it to be well tolerated in animal tissues when used in pure form. There is no foreign body reaction, the tissue response being similar to that seen in the use of tantalum and methyl methacrylate. Polyethylene does not inactivate penicillin.

Possible applications for polyethylene products are suggested by these investigators. For example, it may be useful in neurosurgery for constant drainage of ventricular or subarachnoid fluid. While it is not expected to replace fibrin film for certain neurosurgical application, polyethylene film, possessing great pliability, low specific gravity, relative transparency and the ability to hold silk sutures securely, should be superior to either fibrin film or tantalum foil as a dural substitute when a watertight closure of dural defects is required. Polyethylene film is much less expensive than tantalum foil and should be an adequate substitute for it in its other surgical uses, such as in the practice of wrapping the site of a nerve anastomosis.

Polyethylene has already been used to a limited extent in human patients with "completely satisfactory results." Further experimentation and clinical trials will determine its value in fields of surgery other than neurosurgery.

Penicillin for Diphtheria

In the opinion of D. A. Long (*Brit. Med. J.* 1:884, 1947), the aim of penicillin treatment of diphtheria is the rapid elimination of pathogens with the prevention of further toxin formation. His study of other reports induced him to employ much larger doses of penicillin than had been administered previously. Of 3 patients whose treatment was reported in detail, 2 were given one million units daily for three days and the third was given half a million units. This patient, who was less toxic than the other 2, recovered like the first 2, but her convalescence was complicated. Three further cases have been treated. All were mild, a million units of penicillin a day for three days was administered, and in none was it possible to demonstrate diphtheria bacilli after the first day's treatment. Long concludes that at least one million units a day would appear to be desirable in severe cases. The value of penicillin is particularly striking in the presence of secondary infection. The importance of early adequate antitoxin administration is emphasized.

Ocular Prophylaxis with Penicillin

For many years the silver nitrate drop method has been popular for prophylaxis of ophthalmia neonatorum. The procedure, however, has certain disadvantages such as irritation and pain and the possibility of chemical conjunctivitis. The possibility that penicillin might obviate some of these objections led H. C. Franklia (*J. A. M. A.* 134: 1230, 1947) to make a clinical comparison of penicillin and silver nitrate for ocular prophylaxis in infants. In his investigations a total of 1,710 infants were studied in the nursery and at home during the first two weeks of life. The crystalline sodium salt of penicillin was used because of its stability.

In the nursery group, the occurrence of pus was approximately one-third as frequent in the penicillin-treated infants as in those given silver nitrate. At home, a higher percentage of those in the penicillin group exhibited pus and other abnormalities of the eye than those in the silver nitrate group. On the basis of these findings, Franklin states that penicillin compares favorably with silver nitrate as a prophylactic agent. Penicillin prophylaxis is to be preferred because danger of permanent injury to the eye is eliminated; and instillation is nonpainful; ocular abnormalities

Quality

SHELLAC

BONE DRY BLEACHED

#65 REFINED EXTRA WHITE

#67 SEMI-REFINED

Particularly recommended in aqueous solution — because

- LOWER ACID NO.
- REQUIRING LESS ALKALI
- GIVING HIGHER LUSTRE
- GREATER DURABILITY
- GREATER FLEXIBILITY
- MORE WATER RESISTANCE

ORANGE SHELLACS — ALL GRADES

Agents in Principal Cities

South Braintree, Mass.—M. F. Robie & Sons
Kenmore, N. Y.—James O. Meyers Co.
Los Angeles, Calif.—H. C. Ross
Philadelphia, Pa.—Frances Paterson
Chicago, Ill.—Harry Holland & Son, Inc.
Baltimore, Md.—William McGill
Cleveland, Ohio—J. H. Hinz Company
St. Louis, Mo.—Phil A. Sullivan Sales Co.
San Francisco, Calif.—E. M. Walls
Danbury, Conn.—J. E. Pike
Canada—H. J. McAdie Co., Ltd
Montreal and Toronto

Samples and Formulations will be furnished on request.

THE MANTROSE CORPORATION

Importers — Bleachers — Manufacturers

136-146 FORTY-FIRST STREET
BROOKLYN 32, N. Y.

PORTABLE

VACUUM BOTTLE FILLER

● This versatile Ertel Unit incorporates all the necessary features for filling small quantities of bottles quickly and efficiently. Ideal for filling sample lots of materials. Has three spout adjustable filling handle, overflow valve and tubing. Pump is direct coupled to motor for high efficiency. Ertel semi-automatic units are described in catalog-15.

WRITE FOR CATALOG-15, TODAY

ERTEL — Liquid Handling Equipment

ERTEL ENGINEERING
CORPORATION
KINGSTON NEW YORK

New York City Sales Office: 40 West 48th Street, New York 19, N. Y.

ASBESTOS FILTER SHEETS ● ASBESTOS SHEET FILTERS
BOTTLE FILLERS ● PORTABLE MIXERS ● PLASTIC PUMPS

GUMS

ARABIC-Sorts, Granular, Powder
KARAYA-Powder
LOCUST BEAN-Powder
TRAGACANTH-All Grades, Whole, Granular, Powder

GELLOID

(Pure Calcium Carragheen Sulfate)
Emulsifier
Stabilizing Agent
Thickening Agent

JACQUES WOLF & CO.

Manufacturing Chemists and Importers
PASSAIC, N. J.

California Branch--339 East 2nd Street
LOS ANGELES, CALIF.

are less frequent during the first days of life; the solution of penicillin need not be made fresh each day; deterioration does not produce noxious substances; an excess of the solution may be used if desired, and the penicillin solution may be used for both prophylaxis and treatment.

Value of Narcosynthesis

In narcosynthesis barbiturates are administered intravenously as a means of facilitating psychotherapy. J. S. New and A. R. Kelly, Jr. (*Southern Med. J.* 40:328, 1947) used this method in about 300 cases of acute war neuroses and a similar number of civilian cases with a wide range of disorders usually classed as psychoneurotic or psychosomatic. They gained the impression that narcosynthesis is of great value. Many patients obtain relief in a few days. With many others the period of treatment, although somewhat longer, is substantially shorter than if other methods are used. In their opinion narcosynthesis is one of the most practical and useful methods available in psychiatry, particularly with noninstitutionalized patients.

Contact Dermatitis from Streptomycin

Since 1944 it has become well established that penicillin is capable of producing epidermal sensitization in a significant number of persons exposed to it. The similarity between penicillin and streptomycin leads to the expectation that the newer drug would also cause local sensitization. That this can happen is indicated in the report of M. J. Strauss and F. C. Warring, Jr. (*J. Investig. Dermatol.* 9:3, 1947) on the occurrence of four cases of dermatitis found among twelve nurses who were exposed to streptomycin while administering the antibiotic to patients. The fact that streptomycin caused this epidermal sensitization was confirmed by patch tests, carried out with proper controls.

Benadryl for the Common Cold

Benadryl which has found wide use for the alleviation of allergy symptoms, may also have an important role as a therapeutic agent in the treatment of the common cold. This is indicated in the report of J. M. Brewster (*U. S. Naval Med. Bull.* 47:810, 1947) who, during the past year, has used this drug experimentally for the treatment of this condition. The drug's palliative effects in colds was first noted in a patient being given Benadryl for allergy. He contracted a cold while under treatment and to everyone's surprise the cold apparently was aborted. In the belief that many of the so-called common colds have an allergic origin or at least an allergic factor, and from experiences of this first patient, it was decided to use Benadryl routinely in all cases of common colds of virus origin.

Since the initial experience, Benadryl has been used in over 100 cases. It has been found to completely abort 10 per cent of such cases, to shorten the course, and afford marked subjective relief to 95 per cent of all cases. This is attributed to its inhibiting effect on the serious discharge from the mucous membrane of the upper respiratory tract and its soporific action. In children especially, the cough reflex is inhibited; this effect being believed due to the elimination of post nasal dripping. Benadryl aborts herpes, the common fever blister, when taken immediately after the appearance of the initial itching, burning wheal. In Brewster's opinion, this drug has proved to be the most satisfying single therapeutic agent for the treatment of the common cold.

Aerosporin and Whooping Cough

The causative organism of whooping cough has so far defied successful chemotherapy, but recent work indicates that this situation may be changed for the better. A report in *Nature* (160:263, 1947) by Ainsworth, Brown and Brownlee tells of successful animal tests in typhoid and whooping-cough with aerosporin, which has been produced in sufficient quantity to conduct clinical trials. This is a basic substance readily produced by *Bacillus aerosporus* (or *B.polmyxa*). It is said to have as high intrinsic potency against selective gram-negative organisms as has penicillin against gram-positive. The substance is bactericidal and does not easily produce resistant strains. These claims, if substantiated by clinical trials now in progress, may show aerosporin to be a major contribution to chemotherapy progress.

Riboflavin Implantation

When oral intake of riboflavin is ineffective or resorption is inadequate because of digestive disease, Y. M. Bromberg and his associates (*Proc. Soc. Exper. Biol. & Med.* 64:354, 1947) have found that implantation of pellets containing riboflavin and cholesterol is a satisfactory method for treating the avitaminosis. This implantation method is also practical where injections are undesirable. It was found that resorption continued for about one and a half months from four pellets containing a total of 50 mg. of riboflavin implanted subcutaneously in a patient's thigh. By similar treatment in another case, riboflavin deficiency of long standing was completely relieved for two months.

Estrogen Synergism

O. H. Bloom (*Am. J. Obst. & Gynec.* 53:263, 1947) has found that a mixture of synthetic estrogenic agents may more efficiently relieve symptoms of the menopause and eliminate the necessity for frequent repeated doses. Diethylstilbestrol given in combination with dimethoxy stilbestrol produces a feeling of well-being far greater than can be attributable a simple additive effect. Hence the conclusion that the synthetic drugs act synergistically. Bloom reports that 105 women were completely relieved of menopausal symptoms for nearly four months after receiving three weekly injections of 15 mg. dimethoxy stilbestrol in combination with 1.0 mg. diethyl stilbestrol in oil. Bleeding, caused by cessation of therapy in three cases, was scant and did not recur. Toxic reactions were absent.

Vitamin A and Mineral Oil

In order to obtain more complete evidence of the effect of mineral oil ingestion on the absorption of vitamin A and carotene, A. E. Mahle and H. M. Patton (*Gastroenterology* 9:44, 1947) studied five healthy young men for fourteen months under controlled dietary conditions. Interpretation of their findings indicates that when the intake of vitamin A is low, or when carotene is its chief source and especially if the liver is damaged, caution should be exercised in the amount of mineral oil prescribed, or it should be prescribed with cod liver oil or some other laxative, which does not act as a solvent for carotene or vitamin A, should be used. However, no evidence was obtained that 30 cc. of mineral oil taken daily at bedtime for as long as fifty-one days, with a diet containing 4,000 I.U. of potential vitamin A, causes an abnormal decrease in the blood plasma level of vitamin A.

ALKALOIDS

GLUCOSIDES---DRUG EXTRACTIVES

The Recognized Domestic Source of Supply Since 1917

ACONITINE
AGARICIN
ARECOLINE
ASPIDOSPERMINE
ATROPINE
BERBERINE
CHRYSAROBIN
COLCHICINE
DIGITALIN
EPHEDRINE
ESERINE
HOMATROPINE
HYDRASTINE
HYOSCINE
HYOSCYAMINE
LOBELINE
OUABAIN
PICROTOXIN
PILOCARPINE
SANGUINARINE
SPARTEINE
STROPHANTHIN
YOHIMBINE

INLAND ALKALOID CO.
MANUFACTURING CHEMISTS
TIPTON INDIANA U. S. A.

FOUNDED T & B 1856
The Symbol of Standardization

GUMS

ARABIC
TRAGACANTH
KARAYA

WHOLE GUM—Cleaned and repacked before shipment.

POWDERED GRADES—Standardized by milling under strict laboratory control.

GRAIN GUMS—Graded to uniformity and standardized.

T & B STANDARDIZED GUMS are your best protection against production difficulties.

All Powdered Gums Standardized by Laboratory Control

THURSTON & BRAIDICH
286 Spring Street New York 13
Represented in Chicago by A. C. DRURY & CO., INC.

QUALITY RAW MATERIALS

Our complete stocks guarantee that you can obtain the exact grade and quality for your requirements without delay.

BEESWAX, sunbleached and yellow
Refined U.S.P.

TRAGACANTH GUM, all grades

KARAYA GUM, all grades

STEARIC ACID, fancy triple pressed

QUINCE SEED, Persian, recleaned

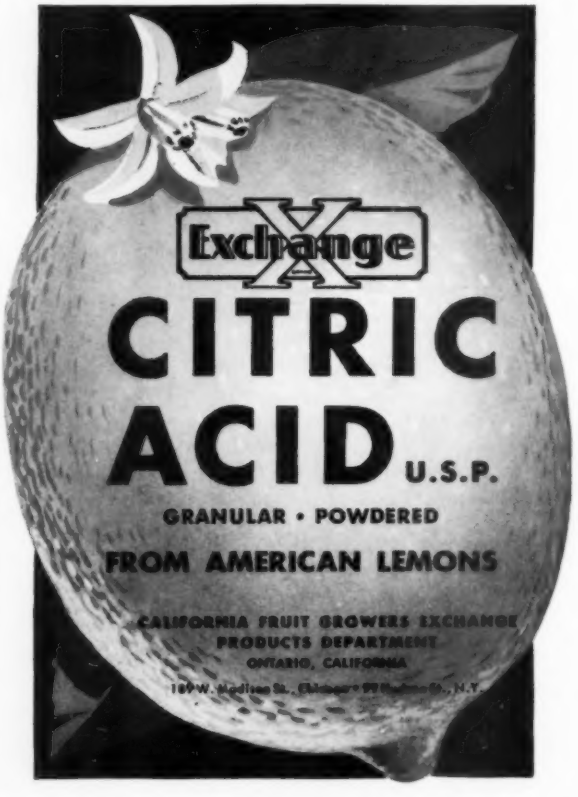
also

SPERMACETI WAX CERESIN WAX
CAMPHOR

and all other cosmetic raw materials. Samples on request.

Write for latest stock list

WALTER H. JELLY & CO.
INCORPORATED
412 N. Western Avenue Chicago, Illinois



The Sophisticated Package

Lustrously black jars, ceramically transformed out of standard flint jars by our Glass-Crafters shop! The jet black is permanently fired-in and is really swank! Available from stock in 1, 2, 4, 8, and 16 oz.

another
"SHOPPER STOPPER"
by Braun

W. BRAUN CO.
Glass Containers and Closures
304 N. CANAL ST. • CHICAGO 6, ILL.
347 FIFTH AVE. • NEW YORK 16, N. Y.

Lower Your Unit Costs

POTDEVIN

6"—8½"—12" and 18" wide
LABEL PASTERS

Write for FREE catalog LP-10

POTDEVIN MACHINE CO.
EST. 1893
1257 38TH ST. BROOKLYN 18, N. Y.
POTDEVIN

PRIVATE FORMULA
Tablets and Capsules
BY THE THOUSANDS—
OR BY THE MILLIONS

Over 30 years' experience enables us to render you prompt, accurate, and dependable service in the manufacture of your tablets and hard shell capsules. Our central location expedites delivery to any point in the country. Furnished bulk or packaged.

Vitamin Tablets and Capsules—Tablets—Ointments—Powders

We Invite Your Inquiries

Standard Pharmacal Co.
OF CHICAGO
PRIVATE FORMULA MANUFACTURERS
M. F. Charley, President
847-853 W. JACKSON BLVD. CHICAGO 7, ILL.

GREEFF

QUININE SULPHATE
USP

Available for immediate shipment from NEW York stocks without government allocation or restriction on use.

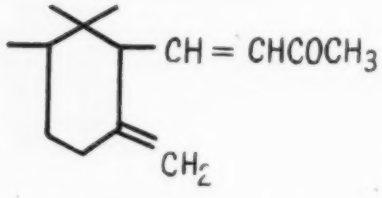
R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

Perfumer's Shelf

Establish Structure of Natural Irone

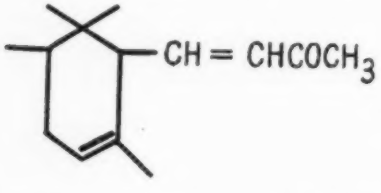
Since Tiemann and Krueger in 1893 isolated the irone of iris root essence, the problem of the constitution of this ketone has engaged the attention of numerous eminent scientists. In spite of their efforts, it had not been possible up to the present to arrive at any satisfactory solution.

The two papers which L. Ruzicka, in collaboration with Firmenich & Co., was published in the October, 1947 *Helvetica Chimica Acta* mark a historic date in the chemistry of synthetic perfumes. These scientists, who had already distinguished themselves by the discovery of the large cycles, have at last succeeded in definitely establishing the constitution of irone and in achieving its synthesis. Natural irone is a tetramethylcyclohexanol derivative of the following formula:



It is distinguished from the ionones by the presence of a methyl group in position 6 and the methylenic semicyclic group. The term ϑ -irone is proposed by the discoverers for this isomerism.

These scientists have also succeeded in the synthesis of a α -irone which corresponds to the following formula:



This substance possesses the exact odor of natural ϑ -irone and is olfactorily totally different from the ionones and the methylionones. α -irone existed in considerable quantities in the concrete essence of iris about thirty years ago when distillation was carried out in a strongly acid sphere.

Buchu Oil and Diosphenol

In spite of the development of modern therapeutic agents, says E. A. Lum (*Manuf. Chem. & Manuf.* Perf. 8: 393, 1947) buchu leaves have long enjoyed a high reputation in South Africa as a valuable medicinal herb for the treatment of renal, urinary and digestive upsets. A new method of distillation which yields an oil with a high content of diosphenol, the active principle, makes possible improved applications.

Of the three chief varieties of buchu, only the variety *Barosma betulina*, is of medicinal importance; the other two containing little or no diosphenol. On steam distillation, buchu yields from 1 to 3 per cent of a yellowish or brownish volatile oil; the percentage depending to some extent on the age of the leaves and the method of drying used. The oil has a characteristic aromatic odor and contains quite a large percentage of the chief active principle, diosphenol. In fact, as distilled at present with special apparatus designed to ensure a high extraction rate and to prevent deposition of crystalline diosphenol in the still, buchu oil is practically solid at normal temperatures and a diosphenol content as high as 80 per cent has been found. Usually 85-90 per cent of the oil present in the leaves can be recovered by steam distillation.

Diosphenol is a ketophenol, also known as buchu camphor, and occurs in "soft" needle crystals of a slightly greyish color. It has a strong, characteristic aromatic odor, slightly camphoraceous and recalling buchu. Diosphenol melts at 83°C. and boils at 109 to 110°C (10 mm.). It is optically inactive. It gives a green color when shaken with water to which a drop of ferric chloride solution is added, and is soluble in most fixed and essential oils and paraffins. Diosphenol may be obtained synthetically from dibromomenthone by shaking with dilute potash or in a similar manner from dibromocarvomenthone.

It is suggested that the buchu oil with a high diosphenol content now being produced in South Africa might well replace the rather unsatisfactory buchu gelenicals, particularly concentrated infusion of buchu, in certain medicinal products. A suitable dosage of the oil is 0.25 to 0.50 minum. In tablets and pills, buchu oil is the ideal product and really represents the active principle. This is in contrast to certain buchu extracts which can contain little or no diosphenol because of the method of manufacture which involves heat concentration. In view of the very aromatic properties of the oil, it may find application in small proportions in suitable flavors. Lum feels that trials in this direction should certainly be worth while.

Composition of Kakra-Sringi Oil

Analysis of the essential oil obtained by steam distillation of Kakra-Sringi, made by Karimullah and U. Shankar (*J. Sci. & Indust. Research* (India) 5B:60, 1947) showed the following percentage composition: alpha-pinene 25, camphene 27, *dl*-limonene 4-5, 1, 8-cineole 10, alpha-terpineol 20, and aromadendrene 4-5. In addition to these constituents, the oil contains a small amount of a lactonic stearoptene, which is being investigated further. Approximately 15 per cent of caprylic acid occurs free in the oil.

Determination of Cinnamaldehyde

In the methods given by H. Wachsmuth and R. Lenaers (*J. pharm. Belg.* 1:65, 1946 through *Chem. Abstr.* 41:5686, 1947) cinnamaldehyde is determined colorimetrically with para-phenylenediamine. For a determination on cinnamon essence, prepare a 1 per cent solution of the essence in alcohol. To 1 cc. of the solution add 5 cc. of a freshly prepared 5 per cent solution of *p*-phenylenediamine in alcohol, and 5 cc. of glacial acetic acid. A standard containing 1 per cent of cinnamaldehyde is similarly treated and the products are compared coloreimetrically. For analysis of cinnamon tincture, extract 25 cc. of the tincture in a separatory funnel with 50 cc. of ether, 75 cc. of water and 5 cc. of diluted hydrochloric acid. Separate the ethereal layer and extract the aqueous layer with two 20 cc. portions of ether. Wash the combined ether extracts with 10 cc. of water, then twice with 10-cc. portions of 0.1 N sodium hydroxide, and again with 10 cc. of water. Evaporate the ether on a water bath, dissolve the residue in alcohol and make up to 50 cc. This alcoholic solution is assayed colorimetrically. For cinnamon powder, an alcohol extract is prepared from the powdered drug and this is assayed.

A NEW *Shampoo*

LET OUR LABORATORIES CREATE

- We are **importers, distillers** and **suppliers** of perfume raw materials . . . .
- Our laboratories are manned by **expert** perfumers . . . .
- We can do it for you **better** and **cheaper** . . . .
- May we try?

FRITZSCHE *Established* 1871
Brothers, Inc.

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* °STOCKS: *Atlanta, Ga., °Boston, Mass., °Chicago, Ill., Cincinnati, Ohio, Cleveland, Ohio, Dallas, Texas, Detroit, Mich., °Los Angeles, Calif., Philadelphia, Pa., San Francisco, Calif., °St. Louis, Mo., °Toronto, Canada and °Mexico, D. F.* FACTORIES: *Clifton, N. J. and Seillans (Var), France.*

?
SHAMPOO
ITS FRAGRANCE!

WHAT ABOUT ITS FRAGRANCE?

ALWAYS, when planning a new perfume or cosmetic, there is this challenge: *What about its fragrance?* And along with the question of fragrance there arise other pertinent considerations: What *type* of odor shall it be? If *this* type or *that,* will it be appropriate to the product? . . . or to the times? What will it cost? To find the best answer to this problem of fragrance, it takes a lot of careful planning and a keen understanding of the foibles, fashions and trends that may influence sales of a particular kind of product at a particular time to a particular segment of the population. Under such circumstances, where a product's success rests so heavily upon correct choice of odor, the manufacturer should not hesitate to avail himself of any help or facilities his raw material supplier can offer him. In our case, we have not only the manufacturing and buying facilities that enable us to provide perfume raw materials at reasonable cost, but we also have a large staff of specialists to assist in the formulation or selection of odors that will give added effect to your product's appeal. It is toward this end that we offer our services . . . and whatever your product may be—lipstick or lotion, shampoo, powder or cream—we shall welcome an opportunity to help you with its fragrance.

← ← ← ← *PLEASE UNFOLD THE PAGE*

FRITZSCHE BROTHERS, Inc.

FRITZSCHE BROTHERS, Inc., wishes you all

A Merry Christmas *and a*

Very Happy New Year

Cinnamaldehyde, ascaridol, thymol and carvacrol can be determined more readily in their essences by the use of a Gerber tube. Cinnamaldehyde can be detected by means of *p*-phenylenediamine in pharmaceutical preparations containing the essence, tincture, or spirit of cinnamon.

Musco Pyridine from Musk

During an investigation carried out by H. Schinz and his associates (*Soap, Perf. & Cosmetics* 20:673, 1947), a small quantity of a base, with a boiling point at 12 mm. pressure of 155-160° C., was isolated from natural musk. Analyses of the oily compound and its crystalline derivatives—the picrolonate, the hexachloroplatinate and the tetrachloroaurate—furnished the formula $C_{16}H_{25}N$. The base was unchanged after treating with acid chlorides, and exhibited in alcoholic solution a characteristic absorption spectrum for pyridine derivatives in the ultra-violet range. It was therefore named muscopyridine. On being reduced with sodium and absolute alcohol, muscopyridine passed into a hexahydro derivative, in which the secondary amino group could be detected through the formation of a naphthaline-*b*-sulphonamide. On being oxidized with potassium permanganate, in addition to oxalic acid a pyridine dicarboxylic acid was obtained, which could be identified in the form of its dimethyl ester as pyridine-α, α'-dicarboxylic acid (dipicoline acid). Muscopyridine is therefore very likely an α, α'-disubstituted pyridine derivative. The position of maximum absorption also agrees with this constitution.

Because of lack of material, the constitution of the two substituents in the α-positions of the pyridine nucleus could not be ascertained. However, it was determined that one of the residues is of alicyclic character and that the residues contain at least one non-symmetrical carbon atom.

Muscopyridine belongs to the interesting and only slightly investigated group of compounds which may be termed animal alkaloids. Not long ago, Lederer isolated from castoreum, a material similar to musk, the substance castoramine, which from its formula might be related to the base from musk.

Linalool Determination

According to a note in the *Perfumery and Essential Oil Record* (38:288, 1947), the following method for the determination of linalool in oils has been used recently and found to give consistently accurate results: 10 ml. of the essential oil containing linalool, which has been dried with sodium sulphate, are pipetted into a 125 ml. conical flask with glass stopper and the flask immersed in a freezing mixture. 20 ml. of dimethylaniline, free from monomethylaniline, are added and the mixture well shaken, and then 8 ml. acetyl chloride and 5 ml. acetic anhydride are added, the latter acting as a solvent to prevent crystallization. The mixture is cooled for a few minutes in the freezing mixture, and the flask then allowed to stand for about 30 minutes at room temperature. It is then heated in a water bath at 40° C. for three hours. The acetylation must be carefully maintained at this temperature ± 1° C., and after this time the acetylated oil is washed three times with 75 ml. portions of iced water and then with successive 25 ml. portions of 5 per cent. sulphuric acid until the separating acid layer does not liberate any dimethylaniline on addition to excess sodium hydroxide. The dimethylaniline is thus removed completely, and the acetylated oil is then washed with 10 ml. of sodium carbonate solution to neutralize excess acid and finally washed to neutrality with distilled water. The oil is separated from the last washings and dried over anhydrous sodium sulphate and the ester value is then determined in the usual way. The linalool content is then calculated from the formula:

$$\% \text{ Linalool} = \frac{\text{ml. N/2 KOH} \times 154.14}{20(\text{wt. of sample} - \text{ml. N/2 KOH} \times 0.021)}$$

Where the original oil contains more than 5 per cent esters calculated as linalyl acetate, the following corrected formula is used:

$$\% \text{ Total linalool} = \frac{A \times 77.07\ (1 - E \times 0.021)}{B - A \times 0.021}$$

where A = ml. N/2 alkali required for saponification,
B = wt. of sample, and
E = per cent. esters in original oil, lated as linalyl acetate.

It is noted that this method follows almost exactly that suggested by the Essential Oil Association of America.

Torrey Pine Turpentine

The Torrey pine (*Pinus torreyana* Parry) is an endemic California pine found naturally only in two places: one, near La Jolla, California; the other, on Santa Rosa Island, California. It is occasionally planted in parks in California. Botanically, the Torrey pine is related to the Coulter pine (*Pinus coulteri*) and the Digger pine (*Pinus sabiniana*); these pines form the morphologically distinct group *Macrocarpae*. The composition of turpentine of Digger pine and of Coulter pine has been determined previously. It was found that Coulter pine turpentine is composed of *l*-α-pinene, and *l*-*b*-phellandrene, together with the paraffin hydrocarbons *n*-undecane and *n*-heptane. Similarly, the paraffin hydrocarbon *n*-heptane occurs in Digger pine turpentine to the extent of 95 per cent; the remaining 5 per cent consists of normal saturated aldehydes.

As most pines produce turpentine composed of terpenes, the paraffin hydrocarbons being found only in a few species, A. J. Haagen-Smit, C. T. Redemann and N. T. Mirov (*J. Am. Chem. Soc.* 69:2014, 1947) thought it would be interesting to investigate the chemistry of this third pine of the *Marocarpae*. About 4,000 Gm. of oleoresin was collected from three planted trees. The volatile oil was expelled from the oleoresin by heating it under vacuum, bringing the bath temperature to 200° C. and the pressure to 0.01 mm. There was no appreciable difference in the yield of volatile oil in the oleoresin samples obtained during different months of the operation; neither was there any difference in the yield of the oil by the three trees. The average figures, based on distillation of 17 batches of oleoresin were as follows:

Volatile oil (turpentine)	**17.1 per cent**
Rosin	**81.9 "**
Water	**1.0 "**

Physical examination of the composite turpentine sample, upon which the studies were made, showed the following properties:

Density	**0.8360**
Index of refraction	**1.4656**
Optical rotation	**−118.120**

Chemical examinations were made which show that the gum turpentine from Torrey pine contains approximately 75 per cent *l*-limonene, 10 per cent *n*-decylaldehyde, 5 per cent *n*-undecane, 4 per cent longifolene, 0.2 per cent lauryl-aldehyde and 0.2 per cent of an unidentified C_{10} carbonyl compound, together with less than 0.1 per cent each of nonane and heptane. The occurrence of the paraffin hydrocarbon in Torrey pine turpentine is indicative that the Torrey pine is closely related biochemically, as well as morphologically, to the Digger pine and the Coulter pine.

Have you *enough* packages of your vitamin preparations in retail and wholesale hands to take care of the increased demand which always comes with tough weather?

Are your inventories of bulk vitamins sufficiently high so that transportation delays resulting from severe winter weather will not hold up your production?

Better send your orders to 'Roche' Park now for Thiamine Hydrochloride, Riboflavin, Ascorbic Acid, Pyridoxine Hydrochloride and other vitamins.

'ROCHE'

Vitamin Division

HOFFMANN-LA ROCHE, INC. • NUTLEY 10, NEW JERSEY

Abreast of The Markets

General Price Trend in Fine Chemicals Continues Upward. Olive Oil Expected To Be Much Cheaper.

The price trend in the market for drugs and fine chamicals was upward during the trading period under review. Alcohol derivatives quotations were on the up-grade, ethyl acetate rose substantially, and ethyl acetoacetate was advanced sharply. Amyl acetate made from fusel oil and fusel oil itself were almost unobtainable at higher price schedules and amyl alcohol ex pentane was up. Silver nitrate and cyanide continued to rise under the influence of a higher market on silver bullion. Menthol was also up under better demand on spot and real strength in the replacement market.

Quotations on all kinds of glycerin were raised. Strength was also found in milk powder, blackstrap molasses, fish liver oils, mandelic acid and the mandelates, and narcotics. Acetanilide was considered basically firm by its leading producers. All consumers of boric acid and borax paid higher prices as of November 1st. This was made necessary by the last rise in freight rates. Major mercurials were sharply lower due to the long and continued weakness in the raw material market. Tartrates were down, stearates were advanced in price.

Cheaper Olive Oil Predicted

Recent developments indicate a decline in price for olive oil. Devaluation of the Italian lira is going to help considerably. So will better olive crops, and Italy's great need for dollars.

Italy announced recently that the lira, which has been pegged at an artificial 350 for one American dollar, will approximately follow the free market. The official rate for the last days of November became 589.47 lire for one American dollar, making the lira worth about 60 per cent of what it was. The December rate is not expected to be much different, but it is understood the lira's official value will be cut further if the currency continues to weaken.

This is what devaluation, plus better olive crops, will mean to the American consumer next year, as administration experts see it. Much more fine olive oil at much cheaper prices. Americans demand the highest quality oil, with low acidity. The experts claim Mediterranean exporters next year will have twice as much of this quality oil as the U. S. can consume—and it will all be aimed at the dollar market.

One guess here is that by next summer the U. S. price of olive oil will be down a third from its present level. The new Italian exchange rate is a help. A more important reason is the bumper olive crop in Italy, Spain, Greece, Portugal, and Turkey.

There has been a serious shortage of olive oil in the U. S. for some years. Average American imports from 1930 to 1940 were 30,000 to 35,000 tons a year. The war shut off most of the shipments. From 1941 to 1946 imports averaged less than 4,000 tons a year. This year, the U. S. is expected to receive a mere 6,000 to 7,000 tons. U. S. current demand is figured at about 30,000 tons a year.

This tight olive oil situation is expected to begin easing in January when the first shipments from this year's bumper crop begin arriving.

Italy's olive crop this year is said to be one of its best in the past two decades. Olive oil production is expected to reach 275,000 tons as compared with a pre-war average of 220,000 tons. U.S. Agriculture Department experts say this production should satisfy Italian domestic demand and leave 55,000 tons for export.

Output of olive oil this season in the whole Mediterranean area is expected to reach 1.1 million tons as compared to last year's 800,000 tons. The experts, after deducting for local consumption, estimate that this means an exportable surplus of over 160,000 tons. Of this total, approximately 60,000 tons—twice expected U. S. consumption—is of the quality demanded here.

Despite competition for the U. S. market, Italy is expected to supply most of the U. S. needs.

• Prices quoted in this section were current on the first of this month,

Alcohol Tight

The new and higher quotations for alcohol prevailed in a market that has shown a sharp development of strength over the past several weeks, during which time the principal raw material, blackstrap molasses, has been bought by distillers at steadily rising prices.

Production of ethyl, completely denatured, and specially denatured alcohols in August showed increases over that in July, according to the Alcohol Tax Unit. Offsetting this in some measure was the general increase in withdrawals in August over those in July. Because of the excellence of consumption, stocks at the end of August were lower than they has been on July 31st.

The Reconstruction Finance Corporation as a source from which the alcohol industry might secure supplies will pass out of the picture at the turn of the year or shortly thereafter. This is because the contract between the agency and the Cuban suppliers have been about completed and no new negotiations between those respective bodies are underway. Also, the question of renewal or extension of old contractual conditions, and of new contracts for the purchase of either alcohol or blackstrap molasses of Cuban production is not engaging officials presently. Unless that aspect of the situation shall change, the alcohol industry will be entirely back on a basis of private enterprise and initiative in 1948, which means that the producers will negotiate privately for their blackstrap molasses requirements and the element of competition for stocks may be much more of a factor than it has been for years.

Narcotics Up

Because of the rising cost of production based on the current prices being paid for raw materials, quotations on all codeine salts were advanced to the following basis: Alkaloid, $13.25 per ounce; hydrochloride, $11.85; phosphate, $10.25, and sulphate, $10.75. A higher schedule on all morphine salts was also announced by the manufacturers of opium derivatives. The new price schedule reflects the rising cost of production and was established as follows: Alkaloid, $12.40 per ounce; acetate, $9.90; hydrobromide, $9.80; hydrochloride, $9.90, and sulphate, $9.90.

WE SPECIALIZE IN SUPPLYING

HORMONES

in bulk to the ethical, pharmaceutical and cosmetic trades.

QUOTATIONS UPON REQUEST

INTRAMED CO., INC.

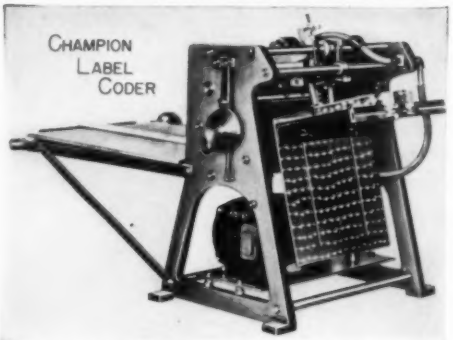
1860 BROADWAY, NEW YORK 23, N. Y.

CHAMPION

Label Coding Machine

Built by

F. L. Smithe Machine Co.



The fastest and most flexible machine ever developed for label coding, having a size range from 7/8" x 1" to 8½" x 11", at speeds of 150 to 200 labels per minute. Machine and Numbering Head completely adjustable. Write for complete information.

Exclusive Agent,

J. EDWARD BAUM

225 Broadway New York 7, N. Y.

FINE MEDICINAL CHEMICALS

DIIODOHYDROXYQUINOLINE

N. N. R. 1947

Amebacide

CALCIUM LEVULINATE

DESOXYEPHEDRINE

Base

Hydrochloride

Spot or Contract Delivery

Prices, Samples on Request

Plant & Laboratory: Lodi, N. J.

B. L. LEMKE & CO., INC.

Manufacturing Chemists

250 West Broadway New York 13, N. Y.

Planning to enter the cream shampoo field?

HERE'S HOW TO START!

Begin with TRITON X-200 as the detergent. Supplied in the form of a viscous creamy liquid, this product of Rohm & Haas research has an outstanding combination of advantages:

(1) Efficiency as a wetting agent.
(2) Ability to emulsify oil and grease.
(3) Ability to disperse dirt.
(4) Close-to-white color.
(5) Freedom from objectionable odor.
(6) Soap-like foam.

With TRITON X-200 as the detergent and RHOTEX GS as a thickener, you have taken the first long stride on the road to profitable shampoo sales!

Write today for full information on these Rohm & Haas products.

TRITON *and* RHOTEX *are trade-marks, Reg. U. S. Pat. Off.*

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals including Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes . . . Detergents . . . Germicides . . . Chemicals for the Leather, Textile, Ceramic, Rubber, Paper, Petroleum, and other industries

More Price Stability Noted In Essential Oils. Trend Toward Firmer Botanical Prices Indicated.

Essential oils and aromatic chemicals were in a fairly steady position throughout the current trading period. There was still no great amount of large quantity buying but nevertheless purchases were being made at a steady pace. Of interest to the trade was the announcement of the tariff reductions established at the recent Geneva conference. This news came in for close study because of the effect it will have on future business.

Essential oil import gains of July failed to carry through, hence, the August tonnage of 359,279 pounds represented a drop of nearly 30 percent from receipts in that month. While some gainers were in evidence, predominate import decreases were established by such oils as anise, bergamot, lemongrass, and petitgrain.

Total imports for the January-August period amounted to 3,922,241 pounds compared with 5,272,602 pounds in the same 1946 period, a decrease of 26 percent. In this period 16 oils recorded increases and 29 decreased, while one oil—rosewood failed to appear on the import list in either period.

Botanicals Firm

Demand for medicinal botanical drugs showed evidence of becoming slightly more active with a trend toward firmer prices. By and large, crude drug prices displayed considerable stability, especially crudes of domestic origin. The general consensus is that the domestic crop collection for the 1947 season will run about one-third less than the 1946 collection. Since domestic collections are considerably smaller than those of 1946 and imported crudes are running 12 percent under last year's receipts, it would appear that any appreciable step-up in demand would cause a further stiffening in prices.

Imported crude drugs totaling 1,332,093 pounds in August were up one-third from receipts of the preceding month. Contributing greatly to the over-all increase were such crude drugs as cinchona bark from Guatemala and British Malaya; henbane from Belgium, Russia and Egypt; jalap from Mexico; nux vomica, and psyllium seed from India, and senna from India, Anglo Egyptian Sudan, and China.

The aggregate crude tonnage for the January-August period amounting to 12,050,782 pounds was still 12 percent below arrivals during the same 1946 months. While the quantity of botanicals received is less than that of last year the quality, no doubt, is considerably superior, dealers being in position to be more critical selecting crude drug stocks.

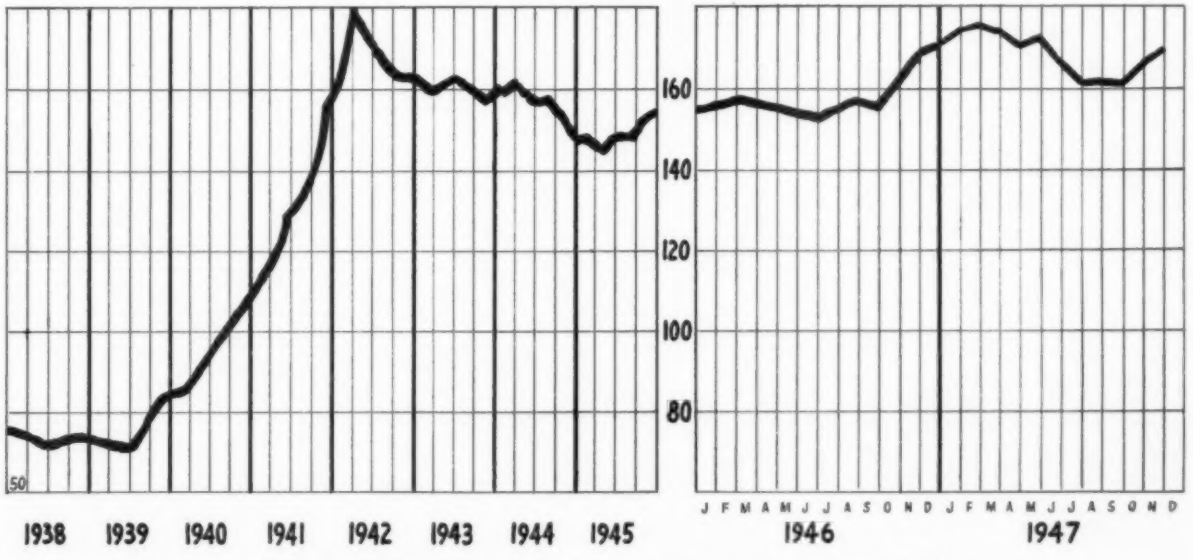
Borax—Boric Acid Up

All price schedules on boric acid were higher as of November 1st. The schedule on less than carlot quantities became as follows, differing slightly as to seller and being higher by either $2.20 per ton or $2.50 per ton, according to producer and method of calculating the higher freight rates that compelled a change in quotations.

As far as carlot quantities were concerned, they remained unchanged as to base, but in every instance buyers will be invoiced for the advance in freight rates, in accordance with contract provisions. Freight charges that prevailed prior to July 1, 1946, are allowed for buyer's account. Advances in rates after that date are charged the buyers.

All price schedules for borax became higher on November 1st. One producer had advanced quotations on less than carlot quantities by $2.20 per ton a fortnight or so ago. On November 1st, other important production upped its prices by $2.50 per ton. The following less than carlot prices differed mainly as to the method applied to increases in the prices in order to reflect the most recent rise in freight rates:—Technical, crystals, in bags, ton lots, $94.20 to $94.50 per ton; less than ton lots, $99.20 to $99.50; in barrel packing, ton lots, $114.20 to $114.50; less than ton lots, $119.20 to $119.50; fine granular, bags, ton lots, $68.20 to $68.50; less than ton lots, $73.20 to $73.50; barrels, ton lots, $88.20 to $88.50; less than ton lots, $93.20 to $93.50; powdered, bags, ton lots, $73.20 to $73.50; less than ton lots, $78.20 to $78.50; barrels, ton lots, $93.20 to $93.50; less than ton lots, $98.20 to $98.50.

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for November advanced from 162.6 to 169.4.

ALGALOID
(Pure Extract of Carrageen)

Exceptionally High Viscosity

Adaptable as a Stabilizer
or Emulsifier in Shampoos,
Hand Creams, Cosmetics

Write for samples
and compare

T. M. DUCHÉ and SONS, INC.
117-119 HUDSON ST., NEW YORK 13

BOSTON 177 State · CHICAGO 61 W. Kinzie · CLEVELAND 16304 LaVerne Ave. · ST. LOUIS 2115 Pine

R. GESELL
INCORPORATED

Manufacturing
Chemists

★

Specializing In Private
Formula Work

★

200 HOUSTON ST.
NEW YORK 14, N. Y.

ATTENTION—PERFUMERS

Adjust Your Formulæ By Using Our
SUBSTITUTES of PROVEN MERIT

Hydroxy Citronellal
Geraniol
Citronellal
Rhodinol

AVAILABLE

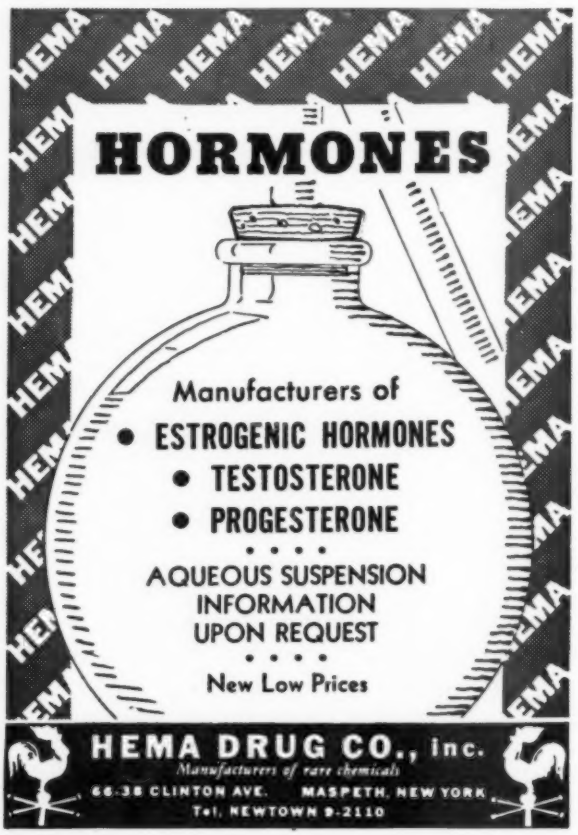
Other Replacements for Aromatic Chemicals,
Essential, and Flower Oils

SOAP and COSMETIC PERFUMES
INDUSTRIAL ODOR MASKS

SAMPLES ON REQUEST

SEELEY & CO., INC.
136 LIBERTY STREET NEW YORK 6, N.Y.

Factories & Warehouses
FARMINGDALE, L. I., N. Y. NYACK, N. Y.
LOS ANGELES, CALIF.



NOVEMBER PRICE CHANGES

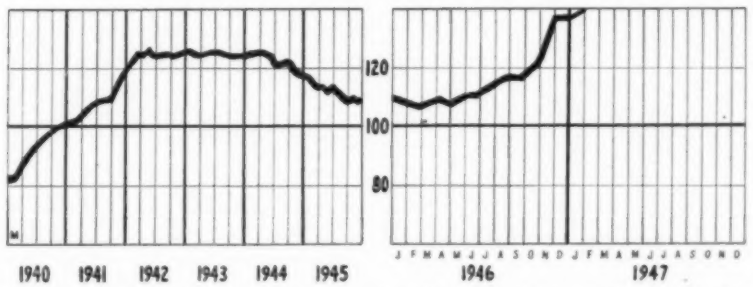
UP

Anise Oil 10c
Arrowroot 2c
Beeswax White 2c
Bergamot 60c
Calcium Stearate 5c
Carnauba Wax #1 10c
Codiene Alkaloid $1.55
  Hydrochloride $1.35
  Phosphate $1.25
  Sulfate $1.25
Coriander Oil $2
Geranium Oil Bourbon $1
Glycerine CP 10c
Menthol Natural 25c
Morphine Alkaloid $1.50
  Acetate $1.10
  Hydrobromide $1.15
  Hydrochloride $1.10
  Sulfate $1.10
Peppermint Oil, Natural 10c
Potassium Bromide 5c
Sassafras Oil 20c
Silver Nitrate 1¾c
Spearmint Oil 65c
Stearic Acid TP 2¼c
Stramonium Leaves 2c
Thyme Oil Red NF 10c
Vetiver Oil Java $4
Wild Cherry Bark Green 2c
Zinc Stearate 5c

DOWN

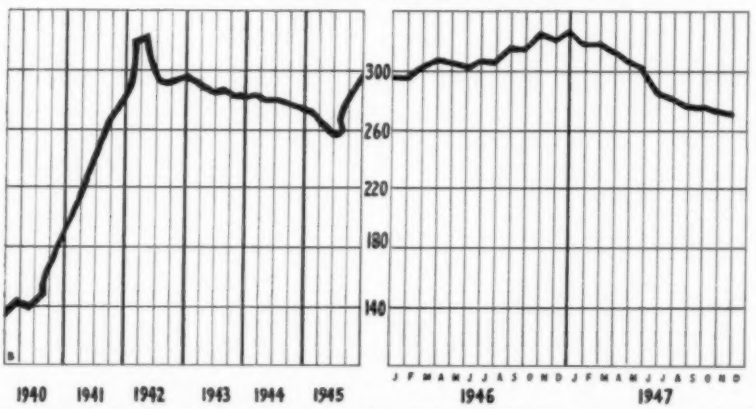
Belladonna leaves 5c
Bois de Rose Braz. 30c
Buchu Leaves 10c
Cajuput Oil 20c
Cantharides Chinese 25c
Cassia Oil Redist. 35c
Cedar Leaf Oil 10c
Cedar Wood Oil 5c
Citronella Oil, Ceylon 5c
  Java 25c
Clove Oil 5c
Cream Tartar 2½c
Ethyl Cinnamate 5c
Eucalyptol 35c
Gentian Root 4c
Indol 50c
Iso Eugenol 15c
Jaborandi Leaves 6c
Lemon Oil, Calif. 15c
  Italian 15c
Lime Oil, dist. 20c
Linalool 30c
Linalyl Acetate 25c
Mace Oil, dist. 80c
Mercury Bichloride 25c
  Calomel 28c
  Metal $2
  Red Precip. 31c
  White Precip. 27c
Nutmeg Oil 30c
Papain Pure powd. 50c
Patchouli Oil 25c
Petit Grain Oil SA 10c
Pimento Leaf Oil 20c
Quince Seed Oil 10c
Rhubarb Root HD 15c
Rochelle Salt 2c
Sage Oil Spanish 40c
Soap Bark crushed 7c
Tartaric Acid 3½c
Terpinyl Acetate 15c
Vanilla Beans Mex. cuts $1
  Mex. Whole $1.75
Wormwood Oil 25c

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinal chemicals index rose fractionally from 183.2 to 183.7. Menthol, morphine sulfate, potassium bromide were up. Cream of tartar, mercury were lower.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 283.4 to 281.7. Belladonna, gentian, rhubarb were lower.

Mercurial Prices Slashed

Major mercurials are sharply lower. The reductions, ranging from 25c to 30c per pound, mark the first changes to take place in these articles since February. The reduction in calomel establishes the article at $1.82 to $1.83 per pound. Corrosive sublimate has been slashed 25c to $1.53 a pound, and red and white precipitate by 30c and 27c respectively to $2.17 and $2 per pound. The reductions which had been long overdue reflect the gradual decline in metal costs over the past year or more. An early readjustment in minor mercurials is expected shortly.

Tartrates Down

Imports of foreign material and lower crude material costs have enabled manufacturers to reduce prices on tartaric acid, cream of tartar, and rochelle salt. The reductions range from 1½c to 4c per pound. The new schedules follow: Cream tartar, powder, barrels, 39c per pound; kegs, 39½c per pound. Tartaric acid, fine granular or powder, barrels, 46c per pound, kegs 46½c per pound. Rochelle salt, fine granular or powder, barrels, 32½ to 33c per pound.

Jasmogee

All the subtle, true fragrance of Jasmin absolute is captured in Jasmogee — the finest simulation of the natural bouquet attained synthetically. Let this latest creation of our research laboratories convince you of its superlative quality by sending for a sample today.

Manufacturers of
Aromatic Chemicals & Perfume Compounds

gunning and gunning inc.
601 WEST 26th STREET, NEW YORK 1, N. Y.

MYSORE GOVERNMENT Sandalwood Oil

Distilled from
Santalum Album

{ INSIST ON ORIGINAL CANS AND CASES }

Sole Agents for the United States
In Canada: *Sole Agents*
W. J. BUSH & CO. (*Canada*) Ltd. Montreal

W. J. BUSH & CO.
(Incorporated)
Essential Oils
New York
Chicago National City, Calif. Montreal

32 years of label experience
in these **32** *pages . . .*

Yours for the asking

A new slant! A new approach, featuring TESTED labels, compiled in one book from the records of the largest label manufacturer in the world, serving over 50,000 customers a year — for 32 years! Send for your FREE copy and see why Ever Ready is your logical label source.

EVER READY *Label* CORP.
141-155 East 25th Street - New York 10, N. Y.

The Chem-Arom Co.
NEW YORK, N.Y.
ESSENTIAL OILS AROMATIC CHEMICALS
PERFUME AND FLAVOR BASES

CHINCHETTE

. . . . . *a new twist on the popular aldehyde type perfume specialty. Can be used as is --- or blended with other perfume oils.*

THE CHEM-AROM CO.
130 Water Street • New York 5, N. Y.

Glycerin Prices Advanced

With as much as 28c a pound having been paid for crude glycerin, major refiners have been forced to increase prices by 10c to 10¾c per pound. The increase in prices automatically wipes out the reduction noted on June 2nd. While the increase is regarded by some as sharp, the cost of virtually all materials going into the soap kettle from which glycerin is produced, have materially increased. The cost of soap making fats has increased 100 per cent whereas the advance in glycerin amounts to approximately 33⅓ per cent.

Last November, at which time refined glycerin was selling at 55c per pound, tankcar basis, the price of tallow was 27c per pound. New refined glycerin prices in tankcars ranging from 39¼c to 40c per pound compares with a current tallow price of 26c per pound.

Demand for glycerin is reported as brisk and in some instances consumers are said to be experiencing difficulty in obtaining deliveries.

Stearates Higher

Leading manufacturers of stearates announced advances in price with the following schedules now prevailing: Zinc stearate USP XIII, 50 lb. lots, 52c per pound; Sodium stearate technical grade A, 175 lb. drums, 53c per pound; Magnesium stearate purified impalpably powder, 50 lb. lots, 53c per pound; Calcium stearate impalpably powdered grade A, 50 lb. lots, 52c per pound; Aluminum stearate technical D, 50 lb. lots, 48c per pound; Aluminum stearate technical fluffy, 50 lb. lots, 49c per pound.

Menthol Advances

Prices on natural menthol were higher at a range of from $9 to $9.25 per pound and they occupied a very firm position thereat in reflecting the forward position of the item in the primary markets of the world. Some quarters feel that the situation was such that further rises in price might develop before a contrary trend sets in.

It was reported that production of synthetic menthol from citronella oil is about to be started for the first time since the war. While this article usually sold at below the natural material before World War II, it is generally believed that the additional supply will not have any immediate effect upon the general market in view of an increase in consumption of this item in the United States.

Domestic manufacturers of synthetic menthol learned from the Department of State that the import duty on that material had been reduced from 50c, the recent rate, to 40c per pound in the trade pacts signed recently at Geneva, Switzerland, by twenty-three nations. The duty on natural menthol also became 40c. It was uncertain just what effect this would have on the proposal to start synthetic menthol production here.

Quinidine Curbs Extension Asked

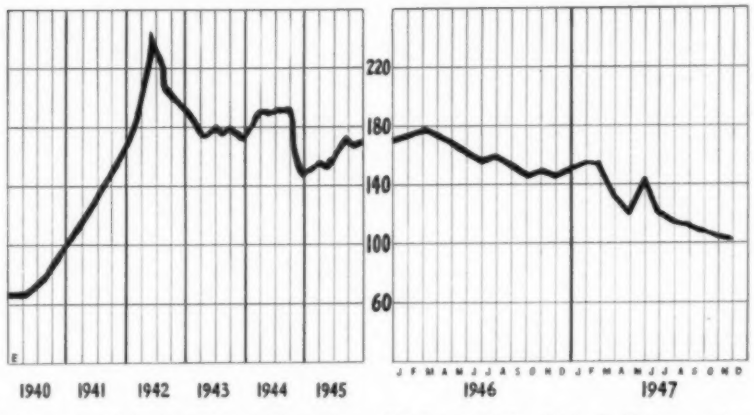
Legislation to extend allocation and end-use controls on quinidine, derivative of cinchona bark used to regulate heart rhythm in cardiac cases, was advocated by American cinchona bark processors. These controls are due to expire in February, 1948.

High quality Far Eastern cinchona bark containing quinidine is not available in adequate supply, leading processors of the bark said, to cover total quinidine requirements. Processing of the bark yields only small quantities of quinidine in relation to the yield of quinine.

The quantity of quinidine in sight for 1948 is insufficient to cover the needs of the 4 million people in the United States who must depend on the drug, it was pointed out. For the year ending June 30, 1948, requirements for cardiac cases in the United States are placed at 517,000 ounces by the Department of Commerce. The estimated supply is 419,000 ounces.

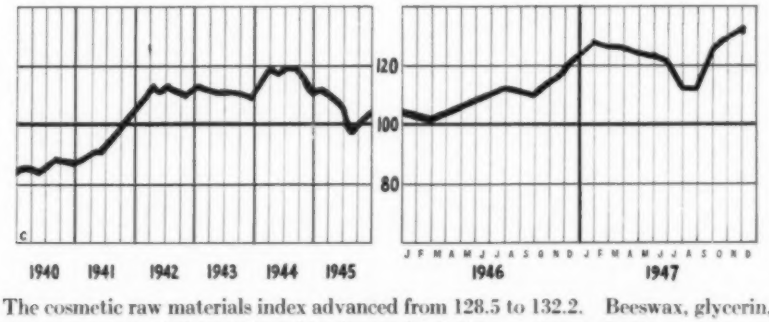
A process exists for making so-called synthetic quinidine from quinine but the cost is many times that of extracting the natural substance from cinchona bark. Researchers do not know how quickly the cost of the process can be reduced. Likewise increasing the quinidine content of cinchona bark is a long range botanical project.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined from 115.5 to 113.6. Bois de Rose, cassia, citronella, clove, lemon were down. Anise and bergamot advanced.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index advanced from 128.5 to 132.2. Beeswax, glycerin, menthol, stearic acid advanced. Quince seed was lower.

Design, Construction and the Complete Equipping of Laboratories, Biological, Chemical, Cosmetic, Drug and Food Plants.

A List of Nationally-known REPEAT Clients will be mailed you on request

WIGTON-ABBOTT CORPORATION
PLAINFIELD, NEW JERSEY
Telephone: Plainfield 6-8100

FINE AROMATIC CHEMICALS ESSENTIAL OILS and COMPOUNDS

Aromatics Division
GENERAL DRUG COMPANY
125 Barclay St., New York 7, N. Y.
9 S. Clinton Street, Chicago 6
1019 Elliott Street, W., Windsor, Ont.

CHARLES B. CHRYSTAL CO., INC.
55 PARK PLACE • NEW YORK 7
Established 50 Years
PLANT: JERSEY CITY, N. J.

TALC—
Domestic
Canadian
French
Italian

KAOLIN
BENTONITE
KALINITE
FULLERS EARTH
PRECP. CHALK
CHINA CLAY

CBC — CHARLES B. CHRYSTAL — MINERALS, CLAYS, COLORS — 1897 — NEW YORK

Delay No Longer!

Write Today
for
QUOTATIONS AND SAMPLES
of fine

LANOLINS
AND
ABSORPTION BASES

Interesting booklets on Lanolin and Absorption Bases offered without charge. Samples supplied on request.

WRITE, PHONE OR CABLE
Dept. S. F.

THE LANAETEX PRODUCTS, INC.
151-157 THIRD AVENUE – ELIZABETH, N. J.
Telephone: Elizabeth 2-7568 Cable: Lanaetex

READERS' QUESTIONS

PROTECTIVE CREAMS: We are interested in manufacturing industrial protective hand creams. If you have any formulas we can experiment with we would be very grateful. Newark.

There are many types of skin protective creams; the various kinds being developed to meet different conditions and different types of sensitizers in industry. The following formulas should serve to indicate some of these types of protective creams. For example a simple preparation for use in the presence of water and water-soluble irritants may be made from:

Petrolatum	**70 per cent**
Hydrogenated cotton seed oil	**30 " "**

Another, a modification of simple ointment, U.S.P. is prepared with:

White wax	**5.0 per cent**
Glyceryl monostearate	**12.5 " "**
Hydrous wool fat	**5.0 " "**
Sodium silicate, commercial solution	**5.0 " "**
Ammonium hydroxide, 10% solution	**0.5 " "**
Petrolatum	**72.0 " "**

Clean, nongreasy preparations that dry on the skin and do not rub off are also available. Indicated in dry work, these preparations offer protection against dust-born irritants or where soiling of the materials or objects being handled is undesirable. One of these, a cream, is made from:

Glyceryl monostearate	**12.0 per cent**
White wax	**12.0 " "**
Wool fat	**6.0 " "**
Cholesterol	**1.0 " "**
Sodium silicate, commercial solution	**5.0 " "**
Ammonium hydroxide, 10% solution	**0.5 " "**
Water	**63.5 " "**

PRESERVATIVES FOR EYE LOTIONS: We have been marketing an eye lotion and so far we have had no difficulty or returns on account of spoilage or clouding. However, to be on the safe side, we are contemplating the inclusion of a suitable preservative. Could I have your recommendations in this connection? New York.

For preserving eye lotions, the trend is in favor of the esters of para-hydroxybenzoic acid. These may be used singly or in combination and form the basis of the so-called "preserved water" now being extensively recommended for making opthalmic solutions. Thus, methyl para-hydroxybenzoate has been found to be not only a good preservative but also practically non-toxic and to exert no action on contact with the conjunctiva of the eye. More generally, a combination of methyl para-hydroxybenzoate and propyl para-hydroxybenzoate is used. Often recommended for use in the ratio of 65 parts of the former to 35 parts of the latter, the mixed preservatives are added in proportions ranging from 0.4 to 1.0 Gm. per liter of distilled water. Heat is required to bring these preservatives into solution.

CREAMY LIQUID SHAMPOO: At the present time we are in need of a formula for making a good creamy liquid shampoo. We would greatly appreciate it if you could send us information for making this type of shampoo. Sioux City.

Almost any standard liquid shampoo can be given a creamy appearance by the use of opacifiers like cetyl alcohol, spermaceti, lanolin and other materials. Only small quantities are required to achieve the desired results.

SMOKING HABIT "CURES": Can you furnish us with the name of a compound or a formula that will control the desire to smoke when used in the mouth, other than the Silver Salts? Any information you can give on this subject will be appreciated. Los Angeles.

By an interesting coincidence, your question has been answered quite completely but concisely, in the May 3rd issue of the British publication, "Chemist and Druggist," from which I quote:

"Many agents have been suggested to combat excessive smoking, chiefly based on the production in the smoker's mouth of an unpleasant taste. Probably the most drastic course is the use of a mouth-wash consisting of a weak solution of copper sulphate, or moistening the cigarette or cigar and with a few drops of copper sulphate solution. The repugnant taste produced in the mouth resulting from the action of tobacco smoke on copper sulphate may be removed by rinsing the mouth with vinegar. Painting the palate with a solution of silver nitrate (0.25 per cent) has also been recommended, while another method is the use of a mouth-wash consisting of dilute solution of hydrogen peroxide, with the addition of a small amount of tannic acid. The anaesthetic effect produced on the palate by allowing a tablet of benzocaine (gr. 3) to dissolve slowly in the mouth is said to be effective in some instances."

NON-GREASY BASE FOR SULFUR: We are having difficulty in developing a satisfactory formula and procedure for manufacturing a skin cream with a water-soluble base for use on oily complexions with blackheads and conspicuous pores. We are especially interested in a formula in which we could include sulphur. Warren

A base designed for incorporating sulphur was described in 1944 by Downing and his associates in the *Archives of Dermatology and Syphilology* as follows:

Sodium lauryl sulfate	**0.8 Gm.**
Cetyl alcohol	**15.0 "**
Glycerine	**5.0 cc.**
White petrolatum	**14.0 Gm.**
Water	**35.0 cc.**

This preparation may be suitably perfumed with oil of rose to cover the sulphur odor. This base is of the washable type and is easily removed from body surfaces.

Fine Chemicals — BPC

PHARMACEUTICAL CHEMICALS

AMINOACETIC ACID
AMINOPHYLLINE
BENZOCAINE
CHINIOFON (YATREN)
CHLORBUTANOL
CINCHOPHEN
8-HYDROXYQUINOLIN
IODOXYQUINOLIN SULPHONIC ACID
NEO CINCHOPHEN
OXYQUINOLIN BENZOATE
OXYQUINOLIN SULPHATE
POTASSIUM OXYQUINOLIN SULPHATE
PHENOBARBITAL
PHENOBARBITAL CALCIUM
PHENOBARBITAL SODIUM
TETRA-IODO-PHENOLPHTHALEIN SODIUM
THEOPHYLLINE

INTERMEDIATES

BENZYL CYANIDE
DIETHYL MALONATE
ETHYL CYANOACETATE
PHENYL ACETIC ACID
8-HYDROXYQUINOLIN-5-SULPHONIC ACID

AROMATIC and FLAVORING CHEMICALS

DIACETYL

BENZOL PRODUCTS CO.
237 SOUTH STREET NEWARK, N. J.

F. O.
LABORATORY TESTED
CHEMICALS!

Camphoric Acid, C.P.
Albumin Tannate (Syn. Tanalbin) U.S.P. XI
Methenamine Anhydromethylenecitrate N.N.R. (Syn. Helmitol)
Ethyl Chaulmoograte, U.S.P. XII
Ethyl Morrhuate, N.N.R.
Sodium Morrhuate, N.N.R.
Tannin Formaldehyde (Syn. Tannoform)
Menadione, U.S.P. XIII

Ask for catalog and technica data sheets on our quaternary disinfectants and other industrial products.

We also manufacture special products in large or small quantities for clients upon request.

FINE ORGANICS, INC.
211h E. 19th St. New York 3, N. Y.
GRamercy 5-1030 Cable: MOLCHEM
Plants at Lodi, N. J. and Black Lick, Pa.

Perfume Bases

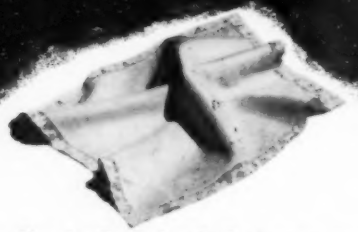
MULTIFLOR
B.L.No. 4265
ROSENOL
AZUFLOR

Artistry in Scents

To enhance the true *"Personality"* of your Perfumes . . . Colognes . . . Toilet Waters and Fine Cosmetics.

NEUMANN·BUSLEE & WOLFE INC.
228 W. Huron St. Chicago 10, Ill.

THE ADDED TOUCH
in Decals



A delicate filmy handkerchief, with the haunting scent of her distinctive perfume. . . . That's an added touch that can endear a woman to a man.

For the added touch that will lend distinction to your cosmetic package, use delicately beautiful PALM FECHTELER *ENGRADEL* DECALS. Sturdy and long lasting, they blend with and add to the beauty of any pack... Samples and estimates on request.

Dept. DS

P.F. DECALS

PALM.FECHTELER & Co.
220 WEST 42nd STREET. NEW YORK 18. N Y

Industry's Books

Pharmacology Therapeutics and Prescription Writing, by Walter Arthur Bastedo, Ph. G., M.D., Consulting Physician St. Luke's Hospital, New York, Fifth Ed., 840 pp., Illus., W. B. Saunders Co., Phila., $8.50.

The rapid advances in the chemical and biological fields, and the growing preference for pure principles rather than crude drugs, have brought into use many new drugs and modifications of old remedies. Parenteral administration is used widely. Because of these and many other therapeutic advances the present edition has been completely rewritten. Among the new remedies considered may be mentioned amino acids, the blood fractions, coagulants and anticoagulants, heparin, dicumarol, curare, snake venoms, analeptics, antihistamines, convulsants and anticonvulsants, folic acid, rutin, thiouracil and its derivatives, sulfonamides, penicillin, streptomycin, demerol, metopon, the cardiac glycosides, the antimalarials, the mercury diuretics, and the BAL treatment of poisoning by arsenic, gold and other substances. Detalis are given of the modern treatment of shock, the anemias, malaria, syphilis and other conditions. As in previous editions the guide throughout has been the need of the physician who employs drugs in the treatment of sick patients.

Union Management Co-operation—Experience in the Clothing Industry, by Kurt Braun, 259 pp., The Brookings Institution, Washington, $3.

Although close co-operation between employers and unions has been undertaken in relatively few instances so far, it has outgrown the stage of wishful or fearful thinking in a number of industrial areas. The clothing industry is one of them. The author examines the conditions under which union-management co-operation may develop. Objections of unions and employers, as well as the reasons impelling both groups to collaboration, are analyzed. The study sets forth the problem of harmonizing cooperation with traditional views of management as to its exclusive functions, on the one hand, and with customary union policies on the other. Since co-operation is a relatively recent outgrowth of collective bargaining, the study endeavors to clarify the relationship between the two methods of industrial relations.

Essentials of Pharmacology by Frances K. Oldham, M.Sc., Ph.D., Research Associate in Pharmacology, The University of Chicago, F. E. Kelsey, Ph.D., Associate Professor of Pharmacology, The University of Chicago, and E. M. K. Geiling, Ph. D., M. D., Chairman of the Department of Pharmacology, The University of Chicago, 440 pp., J. B. Lippincott Co., Phila., $5.

This book is intended to serve as an introductory text in pharmacology. Drugs are grouped according to their actions and uses in a natural and functional organization which facilitates both acquisition and retention of factual material. The reader will find in this volume, both the factual data and the organized background with which pharmacologic facts must be integrated in order to have clinical significance. This book is up-to-date and in accordance with the latest editions of the U.S.P., N.F., British Pharmacopoeia, New and Nonofficial Remedies, and the United States Dispensatory.

The Chemistry of the Acetylenic Compounds, Volume I—The Acetylenic Alcohols, by A. W. Johnson, Ph.D., 394 pp., Edward Arnold & Co., London, $9.50.

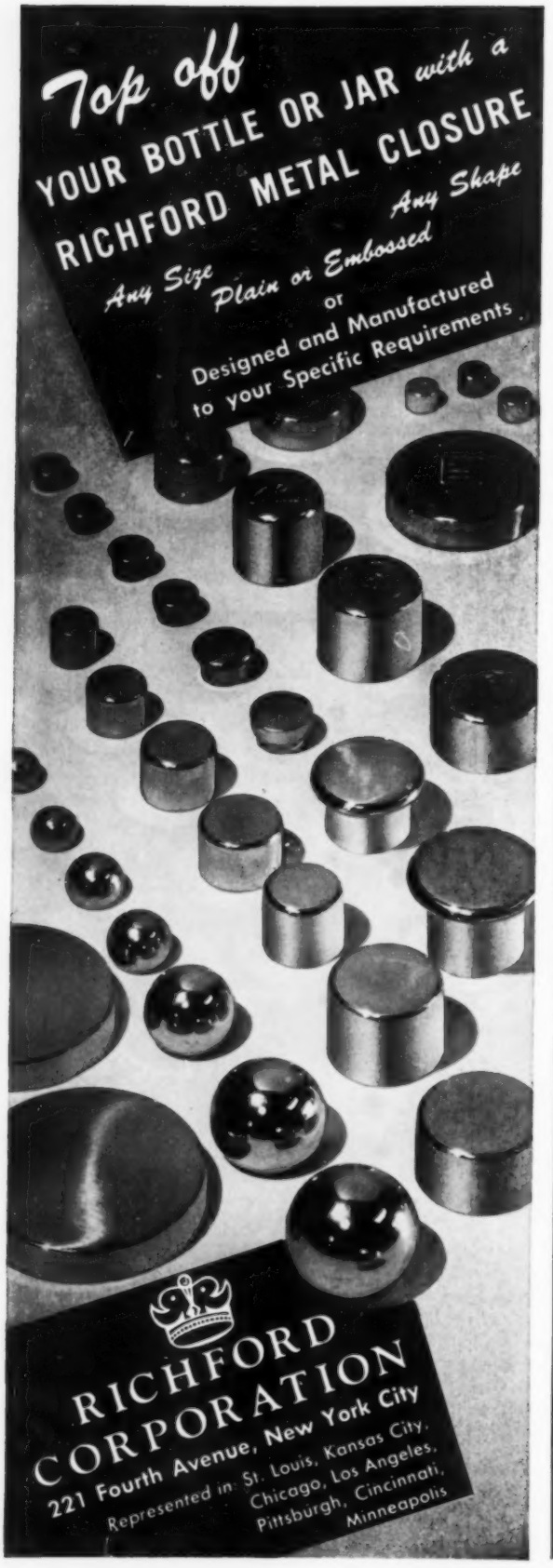
During the last twenty years, a very extensive chemistry of acetylene and its compounds has arisen, and both the academic and patent literature indicate that acetylenic compounds have been widely employed as intermediates in synthetic organic chemistry. Apart from the hydrocarbons, the chemistry of the acetylenic compounds is not widely appreciated, possibly because text-books rarely devote more than a few pages to them. In this "Chemistry of the Acetylenic Compounds" a complete review will be made of the properties and reactions of these compounds. The present volume is devoted to Acetylenic Alcohols; Volume II will be devoted to Acetylenic Acids; and Volume III to Acetylenic Carbonyl Compounds and miscellaneous acetylenic compounds.

A History Of Cosmetics In America, Prepared for The Toilet Goods Association, Inc., by Gilbert Vail, 139 pp., $3.

The history of the cosmetic industry from ancient times until early modern times has been presented by a great many writers. From about the year 1600 to date, however, there is a very considerable gap in the literature on this industry. In an effort to partially fill this gap, The Toilet Goods Association, Inc., requested Mr. Gilbert Vail to prepare this volume which outlines the history of perfumes, cosmetics and other toilet preparations in the United States from early Colonial times. The current book is in no sense a recital of detailed progress either by the industry or by the individual companies. It was designed to be and is an outline history in which company and individual names naturally take their place where they have made contributions which have affected the pattern of the industry as a whole.

Penicillin Therapy Including Streptomycin, Tyrothricin and Other Antibiotic Therapy, by John A. Kolmer, M.D., Professor of Medicine in the School of Medicine and the School of Dentistry, Temple University, Second Ed., 339 pp., Illus., D. Appleton-Century Co., New York $6.

This edition has been heavily revised and considerably enlarged by the inclusion of a great deal of new material and additional illustrations. New chapters have been included on the properties, administration and clinical applications of streptomycin, tyrothricin, streptothricin and other antibiotic agents. This book has been written largely from the clinical standpoint. A new chapter on antibiotic therapy in relation to veterinary medicine has been included which will be of interest and value to veterinarians in the treatment of many diseases of the lower animals. In the treatment of human beings with penicillin, streptomycin and other antibiotic agents, so much has been learned by their trial in the treatment of experimental infections of the lower animals that it is only right and proper that domestic animals should also benefit from the knowledge thus obtained aside from the economic factors involved.



Alginates in Drugs and Cosmetics

(Continued from page 762)

and advantages of using this material. Recently the value of sodium alginate in pharmaceutical products was given recognition by its inclusion in the National Formulary VIII. The fact that the alginates are nontoxic is, of course, another factor in their favor.[16,17]

Today, sodium alginate is widely used for thickening pharmaceuticals and cosmetics to give body to aqueous mixes. The ability of algin to form mucilages and gels of controllable consistency and density favors its use in hand jellies and lotions, ointment bases, pomades and other hair preparations, greaseless creams, dentifrices and other products.[9] Because of its high colloidal properties, sodium alginate serves as a satisfactory emulsifier and facilitates the blending of ingredients.[5]

As might be expected, sodium alginate has found frequent use in the formulation of hand preparations. The advantages of using sodium alginate in hand lotions, for example, stem from the fact that it increases the body of the mixture without requiring an increase in the solid content. It also acts as a stabilizer and is not sticky or waxy. Illustrative is the following frequently cited[9,12,15] formula for a hand lotion:

Glyceryl monostearate	**3.0**
Thiethanolamine	**0.3**
Stearic acid	**1.0**
Cetyl alcohol	**1.0**
Preservative	**0.1**
Sodium alginate solution (1 per cent)	**94.6**

All the ingredients are added to the previously prepared alginate solution and the whole heated slowly until all the components have melted. Stir thoroughly until the mixture cools to room temperature. Allow to stand overnight, mix again, and fill into containers.

In his investigation of stearic acid hand lotions, Musick[17] found that a concentration of 0.3 per cent of sodium alginate imparted a desirable "slip" to the products and improved their general properties. He also recommended that 0.15 per cent of sodium benzoate be included as a preservative. A typical hand lotion containing the requisite amount of algin may be made from:

Stearic acid	**4.0**
Potassium hydroxide	**0.2**
Cetyl alcohol	**0.5**
Glycerine	**2.0**
Alcohol	**5.0**
Sodium alginate	**0.3**
Distilled water, to make	**100.0**

Dissolve the requisite preservative in the warm water and add the alginate slowly, with agitation until dissolved. Add the potassium hydroxide, stir well and heat on a water bath to 85°C. Melt the stearic acid and cetyl alcohol at a temperature not exceeding 85°C. and add to the alginate mixture with continuous stirring until room temperature has been

reached. Then add perfume dissolved in the alcohol in small portions, stirring well after each addition.

Where a hand jelly is desired, a thicker product may be obtained by increasing the sodium alginate concentration or by utilizing the action of calcium ions. An example of the first method is given in the following English formula[4] for a glycerine hand jelly:

Sodium alginate	40 Gm.
Glycerine	250 "
Glycerite of borax	250 "
Distilled water	470 "

Disperse the algin in the glycerine, then stir in the water and glycerite of borax and let stand for a few hours for the alginate to dissolve. Finally, perfume and color as desired.

By slightly modifying this formula, but using the same procedure, a witch hazel jelly may be made from:

Sodium alginate	45 Gm.
Glycerine	200 "
Glycerite of borax	200 "
Witch hazel extract	240 "
Distilled water	530 "

Employing the second method, a hand jelly may be made with about one percent of sodium alginate thickened by means of 0.1 part of calcium citrate and 50 parts of glycerine. The gum is dissolved in part of the water, the glycerine and other desired ingredients, including color and perfume, are added to the solution. Finally, the calcium salt suspended in water is added to cause thickening.[15]

Alginates may also be used in the formulation of skin protective or "barrier" creams for the prevention of industrial dermatitis. Creams of this sort give flexible films with improved adhesion to the skin.[18] Such a cream, using triethanolamine alginate, may be made from:[4]

Triethanolamine alginate	500.0 Gm.
Glycerine	30.0 "
Formalin	2.5 "
Perfume	2.0 "
Water, to make	1,000.0 "

The properties of sodium alginate likewise suggest its advantages for preparing various kinds of products for the hair. For example, a greaseless hair pomade or cream may be made from:[15]

Sodium alginate	1.3
Glycerine	3.0
Calcium citrate	1.0
Preservative	0.1
Perfume	0.5
Water	95.0

To make a hair setting lotion, the proportions are modified somewhat, as follows[16]:

Sodium alginate	2.00 parts
Perfume	1.00 "
Alcohol	5.00 "
Calcium citrate	0.15 "
Water	190.00 "
Preservative	sufficient

U.S.P.
Zinc Oxide
New Jersey
Zinc
Quality and uniformity of this purest grade of commercial zinc oxide are assured by nearly a century of zinc oxide manufacturing experience.
Exceptional whiteness, fineness and purity, coupled with its non-toxic, protective and mildly astringent qualities, make it an especially valuable pigment for pharmaceuticals. Its covering power and adhesive properties are ideal for cosmetics.
Have you tried The New Jersey Zinc Company's ZINC BORATE–3170?
Specify U.S.P. Zinc Oxide made by—
THE NEW JERSEY ZINC COMPANY
Products distributed by
The New Jersey Zinc Sales Company
New York · Boston · Chicago
Cleveland · San Francisco
Los Angeles

PERFUMERS
BASIC MATERIALS
Burton Bush

INDIVIDUAL
FRAGRANCES
FOR
THE PERFUMER

•

BUSH
AROMATICS
INCORPORATED

136 LIBERTY STREET
NEW YORK 6, N. Y.

Cable address: ARROBUSH
Telephone: WOrth 2-6557

The procedure is essentially the same for both products. Dissolve the alginate in the water containing the preservative. Slurry the calcium salt with the rest of the water and add to the alginate solution. Where alcohol is present, dissolve the perfume in it, and add slowly with stirring to the alignate solution, prior to incorporating the calcium salt slurry.

A simpler procedure for making a wave setting lotion calls for the use of:[4]

Sodium alginate	35 Gm.
Formalin	5 "
Distilled water	2,000 "

Dissolve the alginate in the water containing the formalin and let stand to thicken. Finally, perfume and color as desired.

It has long been known that sodium alginate is a useful ingredient of shaving preparations.[9] In brushless shaving creams it acts as a stabilizer, makes the cream easier to spread and rinse from the razor, and lowers the solids content without effecting the action of the cream. It also imparts a definite gloss or finish to the cream. In the lather type shaving creams, the use of 0.2 per cent of sodium alginate prevents the cream from stiffening at high temperatures. Because, the alginate increases the water-holding power of the cream, it stabilizes the lather, retards drying on the skin and reduces the bubble size.[15]

By incorporating appropriate ingredients in sodium alginate solutions it is possible to prepare effective and pleasant after-shave lotions,[10] liquid rouges[15] and sun tan lotions.[9] Algin is a useful ingredient of beauty masks or facial packs. When used in association with lime water, sodium alginate provides an excellent vehicle for paste products of this type.[10] Quite interesting is the use of algin's foam-stabilizing property in the preparation of bubbling baths. This is illustrated in the following formulas as given by Bergy:[9]

Wetting agent	12.00
Distilled water	81.75
Sodium alginate	0.50
Perfume	1.00
Alcohol	5.00

The wetting agent (Aerosol OT, 100 per cent or Nacconol NRSF) is dissolved in half the water at 70° C. Separately, the alginate is dissolved in the rest of the water at the same temperature. When clear, the two solutions are mixed and allowed to cool to 40° C. when the perfume dissolved in the alcohol is added.

Sodium alginate has found growing utilization in paste and liquid dentifrices.[4, 9, 10] In toothpastes, algin acts as a suspending agent for the powder, is simpler to use than other gums, increases the wetting action of the paste, and will not corrode the tube. Calcium citrate may be used to thicken the mixture, but it has been said[15] that dicalcium or tricalcium phosphates may cause trouble and should be avoided.

Considerable interest has been aroused by the formulas for a liquid dentifrice developed by Englehard.[20] A recent modification, cited by Green,[12] is as follows:

Sodium alginate	**8.0 Gm.**
Distilled water	**400.0 cc.**

Mix and allow to stand overnight and add:

Soluble saccharin	**0.5 Gm.**
Distilled water	**40.0 cc.**

To the combination add:

Flavor	**16.0 cc.**
Alcohol	**200.0 "**
Glycerine	**80.0 "**

After mixing, the combination is added to:

Sodium lauryl sulfate	**40.0 Gm.**
Distilled water	**200.0 cc.**

Finally add:

Amaranth solution, 5%	**2.0 cc.**
Distilled water, to make	**1,000.0 "**

Completely homogenize the product and dispense in suitable containers.

During recent years, alginates have found valuable uses in dentistry as substitutes for tinfoil in processing acrylic dentures, as components of impression materials, and as ingredients of denture adhesives.[21-23] Of growing importance as impression materials,[23] the alginates have the advantage that no heat is required for their preparation and consequently there is no danger of burning the mouth of the dental patient.[24] Improved technics for using these materials have been worked out,[25-26] and various modifications of alginate impression materials have been developed.[27-28]

Of pertinent interest is the use of alginates as hemostatics or styptics. In a large number of cases of extraction and oral surgery, Smith[29] found that powdered alginic acid applied to bleeding points combines with the calcium and immediately forms a coagulum that seals the wound. The styptic action is prompt, new tissue is formed rapidly and no untoward reactions were noted. More recently, sodium alginate has been combined with penicillin to make a styptic for dental work. In this method,[30] 1 Gm. of finely powdered algin is mixed with 0.1 Gm. of light magnesium oxide and autoclaved. On cooling, the sterilized powder is mixed with 20,000 units of penicillin. The resulting powder may be insufflated on to oozing surfaces to produce an artificial "fibrin" clot and to check any possible sepsis.

Of course, sodium alginate has found valuable applications in dermatology, but often the question of compatibility must be considered. Its solutions are particularly useful where consistency and good adhesion are factors incidental to therapeutic efficiency.[9] Sodium alginate is compatible with such dermatologically useful agents as glycerine, the glycols, alkalies, phenol, tannic acid and boric acid, and with dilute (up to about 25 per cent) solutions of water-miscible alcohols.[12-31] The solutions are compatible with some antiseptics, but not with others.[11] They are useful media for application of sulfonamides.[32-33]

Solutions of sodium alginate are effective suspending

Drug and Cosmetic Formulae

Compounding drug and cosmetic formulae is a simple operation of pre-determined weighing, but the successful formula is the result of care and the right scale. Since accuracy is paramount the equipment should have fraction-ounce, gram or grain sensitivity clearly visible on the dial. These are the specifications of all EXACT WEIGHT Scales for formulae compounding to assure absolute uniformity day after day in the most exacting laboratories in the industry. Your scale is most important . . . no equipment you use will save you more money . . . assure better results.

Write for full details.

EXACT WEIGHT Shadograph—a revolutionary new principle in precision weighing, substituting a light ray for mechanical indication. Electrically operated, noiseless in use, high speed operation, extremely high accuraracy. Ideal equipment for drug and cosmetic ingredient compounding of exacting formulae. Built to specifications of your operation in fraction-ounce or gram readings. Scoop or platter as desired. Capacity and visible accuracy as ordered.

INDUSTRIAL PRECISION

Exact Weight Scales

THE EXACT WEIGHT SCALE COMPANY

950 West Fifth Avenue, Columbus 12, Ohio

Dept. AK, 783 Yonge St., Toronto 5, Canada

FOR THE
COSMETIC TRADE

Unusual handling, conditioning and milling techniques make these raw materials for cosmetics the finest obtainable.

▼

ACACIA GUM

ARABIC GUM

BENZOIN GUM

HENNA

KARAYA GUM

LAVENDER FLOWERS

MYRRH GUM

ORRIS ROOT

QUINCE SEED

ROSEBUDS

SANDALWOOD

TRAGACANTH GUM

▲

Write for your copy of our complete 1947 price list, soon off the press

R. J. PRENTISS & CO., Inc.

110 WILLIAM STREET, NEW YORK 7

9 SO. CLINTON STREET, CHICAGO 6

agents for some insoluble materials, but not for others. Osborn and Dekay,[34] for example, found that sodium alginate solutions are good suspending agents for calamine, but were only fair for kaolin. To replace commonly used tragacanth as a suspending agent for insoluble powders, Bergy[9] has suggested the employment of a one percent solution of sodium alginate slurried with 0.12 to 0.14 percent of calcium citrate.

Jellies made with algin has also been recommended for treating burns. One such, employed for treating first degree burns, uses the following jelly as a base:

Sodium alginate	**10**
Liquid petrolatum	**10**
Water, to make	**100**

To this is added 5 per cent of sulfanilamide and 20 per cent of urea. The jelly also contains phenylmercuric nitrate in a ratio of 1 in 600. It is intended for packaging in tubes and is said[35] to be analgesic, bacteriostatic and an epithelial stimulant.

The thickening and other properties of sodium alginate suggest its employment in lubricating jellies and related products. For example, a typical lubricating jelly may be made from:[12]

Sodium alginate	**2.5**
Glycerine	**15.0**
Sodium borate	**1.5**
Preservative	**0.1**
Perfume	**0.2**
Water	**80.7**

Because the alginate is reasonably compatible with low acid concentrations, it may be useful in the formulation of feminine hygiene jellies. In such items it is often desirable to alter the consistency without excessively increasing the solids content.[15]

Since it is used in making edible products, it is obvious that sodium alginate may also be used to prepare orally administered medicaments. It is useful, for instance, to prepare mineral oil emulsions, replacing the agar and tragacanth generally used for making these products.[11] Such utility is illustrated in the following formula:[12]

Mineral oil	**50.000**
Acacia	**1.250**
Sodium alginate	**0.500**
Vanillin	**0.005**
Saccharin	**0.005**
Preservative	**0.100**
Water	**48.140**

Sodium alginate can effectively and economically replace tragacanth in the suspension of barium sulfate for radiographic purposes. Matthews[11] has described methods for making a free-flowing product for enemas as well as a somewhat thicker, flavored barium meal for X-ray contrast purposes.

Another field of utility for the alginates is in the production of pills and tablets. Alginic acid, which swells extensively in aqueous media even in the presence

of other salts and acids, is said[4] to be a very suitable disintegrant for pills. For this purpose 5 per cent of alginic acid is incorporated in the mix and the tablets are made in the usual way. The studies of Osborn and Dekay[34] have also shown that different proportions of sodium alginate had various effects on the granulation, sieving, compression and disintegration of tablets. Thus, 0.5 and 2 per cent of sodium alginate were highly effective with regard to disintegration of tablets, but the use of one per cent yielded poor results. In this connection, it has also been noted[4] that the film-forming characteristics of sodium alginate make it suitable for coating tablets.

Work is being done to further explore the potentialities of alginates in medicine and surgery. Recently, for example, Blaine[36] reported experimental observations on absorbable alginate products. He noted that alginates possess certain properties which make them attractive for surgical use. As clot, film, or gauze they are absorbed in animal tissue with minimal reaction. In addition, these products are readily sterilized by autoclaving.

BIBLIOGRAPHY

1. Moncrieff, R. W.: Manuf. Chem. & Manuf. Perf. 16:86, 1945.
2. Mantell, C. L.: "The Water-Soluble Gums," New York, Reinhold, 1947, pp. 105-119.
3. Anon.: Chemurgic Digest 4:232, 1945.
4. Anon.: "Alginates," England, Alginate Ind., Ltd.
5. Frederici, N. J.: Soap & Sanit. Chem. 23:35, May, 1947.
6. Anon.: "Algin," New York, Algin Corp. America, 4 pp.
7. Anon.: "Isco-Algin," New York, Innis, Speiden, 1944, 2 pp.
8. Anon.: Indiana Pharm., Nov. 1944, p. 434.
9. Bergy, G. A.: Am. Prof. Pharm. 5:367, 430 & 494, 1939.
10. Anon.: Drug & Cosmetic Ind. 42:109, 1938.
11. Matthews, D. R.: Pharm. J. 148:79, 1942.
12. Green, M. W.: Bull. Nat. Formulary Comm. 14:97, 1946.
13. Tod, C. W.: U. S. Pat. 2,405,861, 1946.
14. Gates, J. I.: U. S. Pat. 2,420,308, 1947.
15. Anon.: Drug & Cosmetic Ind. 43,428, 1938.
16. De Navarre, M. G.: "Chemistry and manfacture of Cosmetics," New York, Van Nostrand, 1941, p. 290.
17. Musick, A. H.: J. A. Ph. A., Pract. Ed. 3:264, 1942.
18. Hopkins, S. J.: Manuf. Chem. & Manuf. Perf. 18:389, 1947.
19. Allen, C. H.: Soap, Perf. & Cosmetics, Mar. 1943, p. 166.
20. Englehardt, P. W.: Bull. Am. Coll. Apoth. 7:7, 1946.
21. Mathews, E.: Brit. Dental J. 76:8, 1944.
22. Molnar, E. J.: Dental Lab. Rev. 18:22, 1943; 19:18, 1944.
23. Anon.: Dental Survey 22:895, 1946.
24. Skinner, E. W. & Pomes, C. E.: J. A. D. A. 33:1253, 1946.
25. Jordan, L. G.: J. A. D. A. 32:985, 1945.
26. Skinner, E. W. & Pomes, C. E.: J. A. D. A. 35:245, 1947.
27. Noyes, S. E.: U. S. Pat. 2,422,497, 1947.
28. Vallandigham, V. V.: Canadian Pat. 443,051, 1947.
29. Smith, C. A. H.: Science 103:634, 1946.
30. Blockley, C. H.: Brit. Dental J. 82:213, 1947.
31. Anon.: "Kelgin," New York, Kelco, 1946, 2 pp.: also Chem. Preview, Mar-Apr., 1946.
32. Presslie, R.: Pharm. J. 159:183, 1947.
33. Lott, W. A.: U. S. Pat. 2,422,688, 1947.
34. Osborn, G. E. & Dekay, H. G.: J. A. Ph. A., Pract. Ed. 2: 420, 1941.
35. Durham & Rae: Brit. Med. J. 1: 566, 1945.
36. Blaine, G.: Ann. Surg. 125:102, 1947.

Merging Industry Interests

(*Continued from page 754*)

cians, and the like are the predominant outlets. Chain drug store organizations are included in the outlets for these manufacturers, but these are also manned by registered pharmacists.

Controversies have arisen in past years over any number of subjects, but the one that is seething now is over the distribution of proprietary or ready-packaged medicinal preparations by other outlets than the retail pharmacist. During recent years, and more especially since the enactment of the Food, Drug, and Cosmetic Act in 1938, more and more products have been restricted not only to the retail pharmacist for distribution, but also, in many instances, more and more prod-

If you want a "see-through" package

Customers like to see what they're buying and they go for products packaged in LUSTEROID.

These crystal-clear vials and tubes are strong, rigid and unbreakable, yet provide perfect product visibility while protecting the contents in transit, in stock and in use.

LUSTEROID comes in all colors of the rainbow—clear or opaque. Its light weight saves money in handling and shipping. Its printability cuts labeling costs since the sales message can be made an integral part of the package.

Sizes from ¼" to 1-¼" in diameter, lengths up to 6". Cork, slip-on and screw-cap closures. Write for full details.

LUSTEROID CONTAINER CO., Inc.
Formerly Lusteroid Division of Sillcocks-Miller Company

Office and Factory
10 W. PARKER AVENUE, MAPLEWOOD, N. J.
MAILING ADDRESS: SOUTH ORANGE, N. J.

PUROCAINE
BRAND
PRODUCTS

PROCAINE HYDROCHLORIDE USP XII

•

PROCAINE BASE

•

BUTYL-p-AMINOBENZOATE USP XII

•

ISOBUTYL-p-AMINOBENZOATE

•

EPINEPHRINE USP XII

•

d, l-DESOXYEPHEDRINE
Base or Hydrochloride

•

d-DESOXYEPHEDRINE
Base or Hydrochloride

•

AMPHETAMINE BASE

•

MENADIONE (Vitamin K-3)
U. S. P. XII

REG. U. S. PAT. OFFICE

PUROCAINE, INC.

Sales Division:
90 WEST STREET, NEW YORK 6, N. Y.
Phone: REctor 2-6109

Main Office:
PACKARD BLDG., PHILADELPHIA 2, PA.

ucts are being restricted to distribution only on the prescription of a physician, dentist, or veterinarian. Naturally manufacturers of drug preparations of any type are bound to feel a certain resentment toward this sort of thing, but the so-called ethical manufacturers, since they work closely with the medical profession, cannot express any outward resentment and must go along with the recommendations that the sales of an increasing number of things be restricted at least to the retail pharmacist, and in many cases to the written prescription.

Naturally, many of these controversies are quite easily settled by an authority over which no group in the industry has any control—the Federal Food and Drug Administration of the Federal Security Agency. And once the FDA has made up its mind about restricting the sale of preparations in certain ways, the industry follows along. Furthermore, the lead of the FDA is immediately followed up by a number of states through the insistence of the pharmacists acting through their state boards of pharmacy, and with the cooperation of the physicians of the states and the state board of health.

Commercial controversies over the matter of discounts have been very bitter in the past between the wholesale druggists and the manufacturers. Direct attacks have been leveled against certain manufacturers disrupting the normal flow of business of these manufacturers to a considerable extent. However, within recent years, the manufacturers and wholesalers have been working in close harmony largely because the the manufacturers have paid more attention to the problems of the wholesalers, while the wholesalers have been more tolerant of the ideas of the manufacturers and just how far the manufacturers could go in giving the wholesalers everything which they demanded.

Controversies arose in past years between the independent retail druggists and the chain drug store organizations, with the manufacturers caughti n the middle and the wholesalers naturally aligning themselves with the interests of their customers—the independent retail druggists. This situation was largely settled by the fair trade laws which stopped chain store organizations from underselling the independent retailers with loss-leaders, and by the enactment of the Robinson-Patman Act which eliminated completely the giving of additional discounts to those who do not fairly earn and deserve them. Therefore, despite the divergent interests of the various branches of the industry, the controversies which now arise are less in some, and in most instances not nearly so bitter or of so long a duration.

Flavoring of Medicinal Preparations

(Continued from page 757)

be made of physical properties, such as water, alcohol or glycerol solubility. As Fantus pointed out, "The best solvent is the best vehicle." Substances highly soluble in alcohol will hardly leave that vehicle to dissolve in

the aqueous saliva, so that some of the bitter substances such as the barbiturates may be administered in alcoholic solution up to 30% or more, with appropriate aromatics, and be found fairly acceptable. Following the same principle, saline and other highly water soluble substances should not be dispensed in alcoholic elixirs.

In products with objectionable odor, but no taste, judicious use of other odorous substances may blend the unpleasant odor into a more pleasing one, as shown by the use of musk and civet, both unpleasant odors, in perfumes. Aromatic "demulcents" such as vanilla, coumarin, benzaldehyde (bitter almonds) and maple are often preferable to the sharp odors of orange, peppermint or cinnamon for blending, covering or disguising a large number of very disagreeable odors. Addition of taste substances should be done with caution and it should be remembered that many substances added for aromatic effect, may in turn introduce an unpleasant taste, for it must not be forgotten that odoriferous substances usually also have taste.

The pharmaceutical product which unfortunately has both a repulsive odor and a nauseous taste requires equal and separate attention to both factors. Most often, the practical attack is to subdue and modify the taste with demulcents and sweetening agents and then overwhelm both bad taste and odor with some pungent flavor such as peppermint, wintergreen or sassafras. Dilution of taste and odor may also be accomplished by adsorption of the sapid substance on colloidal or resinous material, such as happens in the use of Yerba Santa, Glycyrrhiza, acacia and various emulsions. Finally, and too often relied upon, tastes and odors may be blacked out by overwhelming with a blast of odor and taste that numbs all sensation.

In each case of flavor addition it is important to avoid chemical and physiological incompatibilities and they must be checked thoroughly when a prospective pharmaceutical has been completed, for some are not readily apparent. Often, stability of the product may be indeed improved by addition of taste substances that adjust to a more proper pH or act as chemical preservatives or as reducing or oxidizing agents. Of interest also in this respect is a study of Hazelton and Hellerman on "Influence of Vehicles on the Action of Drugs." They conclude that sucrose, dextrose and glycerin in concentrations above 10 per cent interfere with the gastrointestinal absorption of sodium pentobarbital or metrazol in mice, while propylene glycol and alcohol do not. Oral administration of alcohol in concentrations of 10 per cent or more increases the action of sodium pentobarbital and decreases the action of metrazol.

In summary, the pharmaceutical product to be flavored should first be analyzed as to its taste characteristic and recognized as being of bland or of good or bad taste, of bland or of good or bad odor or any combination of these, and then the proper steps be taken for correction.

In conclusion we would like to point out that an office girl is perhaps as good or better judge than a

ammonium thioglycolate

by STANTON

The unsurpassed quality of STANTON'S Ammonium Thioglycolate is the result of years of specialization and jealously guarded purity of this important cosmetic base.

The last word in production and technical efficiency and careful laboratory controls assures absolute minimums of impurities such as dithiodiglycollic acid, glycollic acid, iron and heavier metals.

When you buy STANTON Thioglycolate you buy insurance on stability, shelf-life, minimum irritation and the least amount of odor.

The results achieved, are faster acting solutions and better permanent waves.

STANTON LABORATORIES STANTON

stanton laboratories, inc.

227 Krams Avenue **Philadelphia 27, Pa.**

(factory and main office)

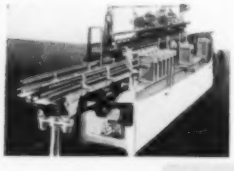
YOU'RE PROUD OF YOUR LABEL

Apply It With The Best Labeler In The WORLD

One of these WORLD Labelers is likely to be the best Labeler in the world for you.

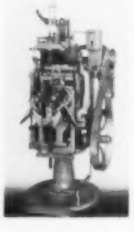
Why? Because only the builders of WORLD Labelers build *all* types and devote *all* their design, engineering, construction, installation and service resources to the single objective of providing the best labeling at the lowest cost for each individual case.

Why not talk over your labeling problems with our nearest representative or, at any rate, send us samples of your labeled containers and tell us your output requirements so WORLD Labeling Headquarters can submit recommendations and estimates.

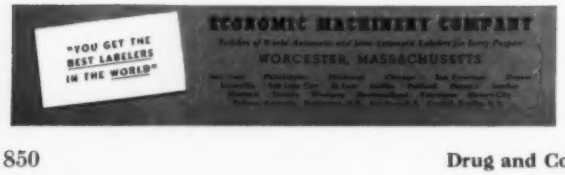


◀ The WORLD BEE-LINE Labeler for high quality precision application of body labels, front-and-back labels, and neck labels, if desired to a variety of shapes of glass containers up to gallon size.

The WORLD ▶ TURRET Labeler for low cost labeling of a quality worthy of the finest products packed in glass. Applies body label, neck label, all-around neck wrap or foil, as desired.



WORLD MODEL S SEMI-AUTOMATIC Labeler has a range of utility that makes it ideal for countless labeling jobs where changes of containers or labels are frequent. Handles every variety of labeling on any size container. ▶



chemist of the efficacy of a vehicle for covering bad tastes, while medicines intended for children should be put to the acid and fire test of the reaction to it by the unsophisticated taste of a child. Finally, since some people like peppermint and not chocolate and vice versa, universal acceptance of a flavored medicament, no matter how elegant, can never be expected.

BIOBLIOGRAPHY

1. Moncrief, R. W.; "The Chemical Senses," John Wiley and Sons, Inc., New York (1946) page 93.
2. Oertly, E. and Myers, R. G., J. A. C. S. 41:855 (1919).
3. Best, C. H. and Taylor, N. B.; "The Physiological Basis of Medical Practice," Fourth Edition, Williams and Wilkins Co., Baltimore (1945) page 1055.
4. Ibid. page 1057.
5. Huysmans, J. K.; "Against the Grain," Illustrated Editions Company, New York (1931) page 132.
6. Lesser, M. A., Drug and Cosmetic Industry 51:400 (1942).
7. Ward, J. C., et al, J. A. Ph. A. 23:984 (1934).
8. Schulte, M. J., Ref. from C. A. 37:3223 (1943).
9. Jaleski, T. C., J. A. Ph. A. 15:461 (1926).
10. Fantus, B., et al, J. A. Ph. A. 23:127 (1934).
11. Hazelton, L. W. and Hellerman, R. C., J. A. Ph. A. 35:161 (1946).

Qualifications for a Cosmetic Chemist

(Continued from page 763)

promotion of his company's products, and also in cooling the advertising ardor of an excessively imaginative copy writer which, if left unchecked, might precipitate most unwelcome controversy with one of the regulatory agencies of the United States Government. Lastly, the cosmetic chemist must be somewhat of an artist, although without the protective armor of an artistic temperament.

I mention all this to support the claim, if this indeed should be necessary, that the good cosmetic chemist has every reason to be proud of his profession by virtue of his training, his experience, his versatility and his over-all intelligence in applying himself to the multitudinous problems relating to his specialty. For the same reason it behooves him to be jealous of his professional standing and to oppose all influences or actions detrimental to it.

Your Trade-Mark Record

(Continued from page 813)

CYRO—IV—A—515,801
Roy Spivey, Tuscaloosa, Ala.
Ser. Jan. 15, 1947 D. U. Nov. 1, 1946

DAIT—VI—BCHM—503,897
Glam-R-Girl Cosmetic Co., Chicago, Ill.
Ser. June 14, 1946 D. U. Jan. 18, 1940

DARK HERALD—VI—B—511,356

S. E. E. de La Parfumerie de Luxe, Paris, France
Ser. Oct. 23, 1946 D. U. Mar. 15, 1946

DEVON—VI—BC—481,431
Saenz, Briones & Cia., Buenos Aires, Argentina
Ser. Mar. 28, 1945 D. U. Sept. 4, 1940
Reg. Nov. 11, 1947—434,238

ELIZABETH LEE EWJ—VI—H—524,786
Elizabeth Lee, Buffalo, N. Y.
Ser. June 25, 1947 D. U. May 10, 1947

ETINCELLE—VI—BCH—525,660
Omnium Arts et Industrie, S. A., Paris, France
Ser. July 2, 1947 D. U. July 9, 1937

FINE ART—IV—A—523,879
Armour and Co., Chicago, Ill.
Ser. June 7, 1947 D. U. 1900

F I T—VI—D—514,126
The Mennen Co., Newark, N. J.
Ser. Dec. 12, 1946 D. U. Nov. 1, 1946

FLEUR-VERI—VI—B—501,907
The Goodman Chemical Co., Brooklyn, N. Y.
Ser. May 11, 1946 D. U. Apr. 26, 1946

FLORIDAIRE—VI—M—511,992
The Floridaire Co., Miami, Fla.
Ser. Nov. 4, 1946 D. U. Sept. 1, 1946

FOAM-MIX—IV—M—514,356
Bernard R. Mackinnon, (Foam-Mix Prod.), Buffalo, N. Y.
Ser. Dec. 15, 1946 D. U. Mar. 8, 1946

FORDGLO—VI—H—525,817
W. F. Ford (Ford Dist. Co.), Marvell, Ark.
Ser. July 3, 1947 D. U. Jan. 1, 1947

G D—(and des.)—VI—BCE—518,347
Guy Degas, Paris, France
Ser. Mar. 1, 1947 D. U. Apr. 18, 1946

GARDA—IV—A—525,464
The J. R. Watkins Co., Winona, Minn.
Ser. July 1, 1947 D. U. June 28, 1935

GENTRIE—IV—AI—517,165
Lionel G. Rothchild (Lenel Co.), Dallas, Tex.
Ser. Feb. 7, 1947 D. U. Jan. 21, 1946

HECTACREAM—IV—M—524,402
Krayer Mfg. Co., Inc., Elizabeth, N. J.
Ser. June 18, 1947 D. U. Nov. 14, 1946

IVEL—VI—B—504,243
William Benyes (Ivel Perfumes), New York, N. Y.
Ser. June 20, 1946 D. U. June 12, 1946

INDELIUM—VI—C—516,661
Joe C. Bode, Jr. (Manson Distrs.), Chicago, Ill.
Ser. Jan. 31, 1947 D. U. Oct. 21, 1945

INDUSPRAY—VI—T—520,192
The Tanglefoot Co., Grand Rapids, Mich.
Ser. Apr. 4, 1947 D. U. Aug. 20, 1946

JELLY-EX—VI—S—523,459
The Cleveland Pharmaceutical Co., Cleveland, Ohio
Ser. June 3, 1947 D. U. May 1, 1947

JUNGLE—IV—A—510,764
Consolidated Cosmetics, Chicago, Ill.
Ser. Oct. 12, 1946 D. U. June 10, 1946

KASAR—VI—K—511,428
Bernard Uzumecki (Kasar Co.), Chicago, Ill.
Ser. Oct. 24, 1946 D. U. June 1, 1906

KAY DAUMIT—VI—BCH—503,975
Kay Daumit, Chicago, Ill.
Ser. June 15, 1946 D. U. Mar. 2, 1942

LA CLEF DE PIERRE DUNE—VI—BC—522,044
Edmond Rosens, Paris, France
Ser. May 7, 1947 D. U. Oct. 25, 1946

LAKES—VI—K—520,793
B. R. Vidal and E. R. Artigas, Madrid, Spain
Ser. Apr. 16, 1947 D. U. Mar. 25, 1946

LANOBRONZ—VI—S—520,635
Max M. Mabel (Lanobronz Labs.), Miami, Fla.
Ser. Apr. 14, 1947 D. U. Mar. 27, 1947

LANOZOL—VI—M—523,452
Wright R. Baker, Pennsburg, Pa.
Ser. June 3, 1947 D. U. Sept. 1, 1929

LINSOAP—IV—A—515,559
Hockaday, Inc., Chicago, Ill.
Ser. Jan. 10, 1947 D. U. 1920

LIP-TRIC—VI—C—517,553
Civray, Inc., New York, N. Y.
Ser. Feb. 15, 1947 D. U. Nov. 16, 1946

Call WH&C for

SESAME OIL

SUPERIOR TO U.S.P. XIII SPECIFICATIONS

COLOR: Almost water-white
ODOR: None
FLAVOR: Bland
DELIVERY: Immediate

Here's the No. 1 ingredient for your fine sun-tan preparations:—WH&C sesame oil refined to *better* than the new U.S.P. specifications.

Recommended, too, for quality cosmetics, injectables, and other medicinals.

Call, write, or wire *today* for samples. Ample stocks are available in our warehouses for immediate delivery.

Also . . .

Apricot Kernel Oil
for immediate delivery!

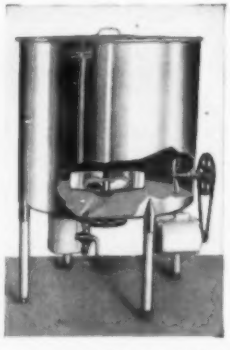
SINCE 1833

Welch, Holme & Clark Co., Inc.
439 WEST STREET NEW YORK 14, N.Y.
Warehouses in New York and Newark, N. J.

Filpaco PRODUCTS FOR IMMEDIATE DELIVERY

"Common Sense"
DISC FILTER
$115 F.O.B. Chicago
Domestic Price

- Designed for filtering water, chemicals, pharmaceuticals, oils, acids, alcohols.
- Operated with either filter paper, asbestos pads or filter cloth.
- Capacity for fairly clear water at 25 lbs. pressure is more than 300 gallons for the first hour.
- Equipped with or without pumping units.
- Easily cleaned.



Stainless Steel STORAGE and MIXING TANKS

- Sizes: 30 gallon to 1000 gallon capacities.
- Fabricated of 18-8 stainless steel.
- 100% drainage.
- Side or bottom agitators or combination of both.
- Special tanks designed and fabricated.

FILTER PAPER

- ANALYTICAL PAPERS
- QUALITATIVE PAPERS
- INDUSTRIAL PAPERS
- FOLDED PAPERS

Features: Manufactured from the finest materials available under rigid specifications for accuracy and dependability . . . papers in light and heavy weights, with slow and fast filtering speeds . . . large stock maintained for immediate delivery . . . cut to any size and pattern . . . samples furnished upon request for experimental purposes.

Other FILPACO (formerly "Filco") Products: Filter Presses, Glass-Lined Storage and Mixing Tanks, Filling Machines, Portable Agitators, Sanitary Fittings, Tygon Tubing, Hose, "Easy-Ride" Gravity Wheel Conveyors, Solid Roller Conveyors, Booster Conveyors, Sanitary and Industrial Pumps, Filter Cloth and Bags, Filter Felt, Asbestos Pads, Activated Carbons, Filter Aids.

EQUIPMENT DIVISION

The FILTER PAPER Co.

2428 S. Michigan Ave., Chicago 16, Ill.

MAE PORTER'S (and des.)—VI—M—504,929
Girlie Mae Porter, New York, N. Y.
Ser. July 1, 1946 D. U. March 1946
Reg. 433,652 Oct. 21, 1947

MAISON MARIE—(and des.)—VI—CEH—517,733
Fred Meier, Butte, Mont.
Ser. Feb. 18, 1947 D. U. Aug. 15, 1944

"MAJOR-DOMO"—VI—H—523,161
James L. Mills, Kinston, N. C.
Ser. May 27, 1947 D. U. Oct. 1, 1946

MEDIMETICS—IV—A—524,593
Dermetics, Inc., New York, N. Y.
Ser. June 21, 1947 D. U. May 20, 1947

NEYSO—VI—MT—524,410
Abe Ney (Neyso Co.), Atlanta, Ga.
Filed June 18, 1947 D. U. May 23, 1947

NORACHROME—VI—T—521,630
Nora E. Brewer, Tarboro, N. C.
Ser. May 1, 1947 D. U. Feb. 15, 1947

NUIT DU SAMEDY—VI—BCHK—520,275
Augustin Reyes, Habana, Cuba
Ser. Apr. 7, 1947 D. U. Feb. 17, 1931

ODALISQUE—IV—A—518,690
Nettie Rosenstein, Inc., New York, N. Y.
Ser. Mar. 7, 1947 D. U. Feb. 11, 1947

"OPHTOCILLIN" (Marlo)—VI—K—508,304
Marlo Lab., Inc., Philadelphia, Pa.
Ser. Aug. 30, 1946 D. U. Feb. 4, 1946

ORSECO—VI—M—519,411
Organic Chemicals Corp., Frederick, Md.
Ser. Mar. 21, 1947 D. U. Feb. 11, 1947

O TEV—VI—D—525,066
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. June 28, 1947 D. U. June 9, 1947

PASSION DE ZOFALY—VI—B—509,399
J. Crespin & M. Laurens-Frings & Cie., Paris, France
Ser. Sept. 20, 1946 D. U. Apr. 30, 1946

PERMA-NAIL OF HOLLYWOOD—VI—E—521,525
Bertram A. Langley (Perma-Nail Co.), Los Angeles, Calif.
Ser. Apr. 29, 1947 D. U. Feb. 17, 1947

PHENYL-MERCIUM—VI—M—515,306
Robert C. Harry (Harbro Co.), Kansas City, Kans.
Ser. Jan. 6, 1947 D. U. June 15, 1946

PLAINSMAN (and des.)—VI—I—497,885
Southwestern Drug Corp. (Red Arrow Labs.), Waco, Tex.
Ser. Mar. 8, 1946 D. U. Feb. 7, 1946

PLAZE—IV—M—516,720
Plaz, Inc., St. Louis, Mo.
Ser. Jan. 31, 1947 D. U. Jan. 6, 1947

PURA SUDS—IV—M—514,221
Phipps Products Co., Boston, Mass.
Ser. Dec. 13, 1946 D. U. Oct. 1, 1946

R 2 L—VI—DM—515,973
G. H. Wood & Co. Ltd., Ontario, Canada
Ser. Jan. 18, 1947 D. U. Dec. 27, 1944

RAMBLING ROSE—VI—B—516,577
Helena Rubenstein, Inc., New York, N. Y.
Ser. Jan. 29, 1947 D. U. Dec. 20, 1946

RAYDERM—VI—M—511,521
Velvet Pharmaceutical Prods. Co., Inc., New York, N. Y.
Ser. Oct. 25, 1946 D. U. June 19, 1946

REBEL ROSE—VI—B—516,578
Helena Rubenstein, Inc., New York, N. Y.
Ser. Jan. 29, 1947 D. U. Dec. 21, 1946

RED JASPER—VI—C—519,650
Gourielli, Inc., New York, N. Y.
Ser. Mar. 27, 1947 D. U. Feb. 12, 1947

RONSARD—VI—B—511,114
Societe des Parfums Ronsard, Paris, France
Ser. Oct. 18, 1946 D. U. February 1945

ROSE TOPAZ—VI—C—519,651
Gourielli, Inc., New York, N. Y.
Ser. Mar. 27, 1947 D. U. Feb. 12, 1947

ROXBETH—VI—M—512,114
Roxanna E. Flood (Roxbeth Prods.), Columbus, Ohio
Ser. Nov. 6, 1946 D. U. Dec. 1, 1945

SANIBEL—VI—ABCH—511,926
G. A. Belling and Co., New York, N. Y.
Ser. Nov. 2, 1946 D. U. Sept. 3, 1946

SANICAP—VI—M—504,808
Benzoin Vogel (The Vogel Labs.), Lake Mohegan, N. Y.
Ser. June 28, 1946 D. U. June 1, 1946

SANIUM—VI—F—524,331
John Hudson Moore, Inc., New York, N. Y.
Ser. June 17, 1947 D. U. May 15, 1947

SCENT EVADOR—VI—M—512,818
B and R Fabrications, Inc., Reno, Nev.
Ser. Nov. 19, 1946 D. U. Aug. 31, 1946
SCOTCH BOURBON RYE—VI—DHI—524,598
Dermetics, Inc., New York, N. Y.
Ser. June 21, 1947 D. U. May 20, 1947
SHESHE—VI—B—515,963
Renoir Parfums, Ltd., New York, N. Y.
Ser. Jan. 18, 1947 D. U. Jan. 13, 1947
SHINING HOUR—IV—A—519,514
Jacqueline Cochran, New York, N. Y.
Ser. Mar. 25, 1947 D. U. Aug. 26, 1941
SMICO—VI—T—524,489
Benjamin D. Smith (Smith Mfg. Co.), Utica, N. Y.
Ser. June 19, 1947 D. U. Apr. 1, 1921
SPEEDY RECOVERY—VI—B—515,093
Norman S. Frankel, New York, N. Y.
Ser. Dec. 31, 1946 D. U. Dec. 2, 1946
STIRIZOL—VI—M—523,453
Wright R. Baker, Pennsburg, Penn.
Ser. June 3, 1947 D. U. Apr. 13, 1928
SUPERBE—IV—A—496,748
Allen B. Wrisley Co., Chicago, Ill.
Ser. Feb. 16, 1946 D. U. June 1934
Reg. 434,091 November 4, 1947
SUTTYE'S GLORYFIER—VI—CH—525,425
Suttye Elizabeth Scott (Suttye Mfg. Co.), Chicago, Ill.
Ser. July 1, 1947 D. U. June 3, 1947
SUZY SUDS—IV—A—516,147
E. F. Patterson (Pa-Tron Prods. Co.), Dallas, Tex.
Ser. Jan. 22, 1947 D. U. Nov. 1, 1946
"SWEET DARKNESS"—VI—B—525,674
Ben Pickard, Chicago, Ill.
Ser. July 2, 1947 D. U. June 28, 1947

TABOO—IV—A—513,029
Consolidated Cosmetics, Chicago, Ill.
Ser. Nov. 22, 1946 D. U. Nov. 13, 1946
TABOU—VI—BC—515,657
Consolidated Cosmetics, Chicago, Ill.
Ser. Jan. 13, 1947 D. U. Dec. 10, 1932
TERMI NATE—VI—T—523,064
Eason Morgan Co., Nashville, Tenn.
Ser. May 31, 1946 D. U. Apr. 1, 1946
THE ANTIQUE SHOP—VI—B—518,103
Rubicon, Inc. (The Antique Shoppe), New York, N. Y.
Ser. Feb. 25, 1947 D. U. December 1940
THE HAND CRAFTERS—VI—C—525,591
E. Maria Hammond, New York, N. Y.
Ser. July 2, 1947 D. U. Mar. 28, 1947
THIS IS LOVE—VI—B—516,489
Lucky-Heart Labs, Inc., Memphis, Tenn.
Ser. Jan. 28, 1947 D. U. Nov. 11, 1946
TRAC—VI—B—502,403
Parfums Weil Paris Co., New York, N. Y.
Ser. May 18, 1946 D. U. May 10, 1946
"TROCHECILLIN" (Marlo)—VI—K—508,301
Marlo Lab., Inc., Philadelphia, Pa.
Ser. Aug. 30, 1946 D. U. Feb. 4, 1946
TROPHOTONE—VI—H—522,681
Lily E. Langston (Trophotone Labs.), New York, N. Y.
Ser. May 19, 1947 D. U. Oct. 29, 1946

"VAGICILLIN" (Marlo)—VI—M—508,306
Marlo Lab., Inc., Philadelphia, Pa.
Ser. Aug. 30, 1946 D. U. Feb. 4, 1946
VAPO-FUME (and des.)—VI—T—507,923
National Disinfectant Co. of Texas, Dallas, Tex.
Ser. Aug. 23, 1946 D. U. June 22, 1935
VARSITY—VI—HI—512,801—(and des.)
Jack L. Rude (Rude Freres and Nadair Parfums), Los Angeles.
Ser. Nov. 18, 1946 D. U. Sept. 1, 1946
VEMCO—VI—H—513,805
Mary Elizabeth Cooke (Mme. M. E. Cooke's), Los Angeles, Calif.
Ser. Dec. 6, 1946 D. U. Nov. 1, 1946
VITA-FORM—VI—C—518,749
Elizabeth F. Bunert, Roseville, Mich.
Ser. Mar. 10, 1947 D. U. Feb. 1, 1945
VODUST—VI—M—524,639
Vodine Co., Chicago, Ill.
Ser. June 21, 1947 D. U. Sept. 3, 1946

WASH DAY—IV—A—521,471
Raymond W. Self, (Self and Co.), Birmingham, Ala.
Ser. Apr. 28, 1947 D. U. Aug. 1, 1946

"YOUR ANGELS"—(and des.)—VI—B—520,943
French Riviera Products, Inc., New York, N. Y.
Ser. Apr. 18, 1947 D. U. Mar. 31, 1947

KOMMON/ SCENTS!

No matter how one analyzes local elections, one conclusion is inevitable: Everybody still wants to know if Eisenhower will run as a Republican.

•

Naturally, there are some exceptions. They want to know if he'll run as a Democrat.

•

Both parties are trying to get him even harder than Rommel did. They argue it's a shame for a man his age to go back to college.

•

Of course, after what Lou Little's footballers did to Army we can understand "Ike's" interest in Columbia.

•

The defeat of Proportional Representation in New York City was a triumph for "two-party government." That's polite for Edward J. Flynn.

•

Among other burning issues was the State bonus for veterans. An informal poll among G. I. friends shows that they will save the bonus money to pay for next year's cigarette tax.

•

To the complete surprise of absolutely no one, winners and losers alike foresaw a trend for '48 in the outcome of the local elections. In the best terms of political equivocation it will boil down to: "Dewey or Don't We?"

•

That's the great comfort of politics. Just when you begin to think there's nothing more meaningless than a politician's promise, you realize there is. That's a politician's prediction.

•

The Cosmetic Industry is missing a great bet in not engaging Representative Knutson as counsel. His proposed hidden tax program is the greatest camouflage job since the introduction of face powder.

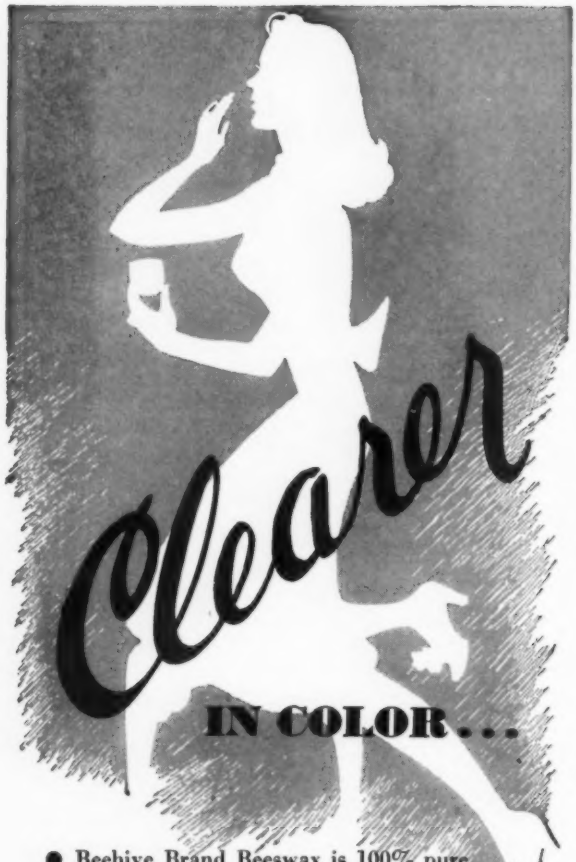
George Fiedler

KELTON
Cosmetic Company

230 West 17th Street
New York 11, N. Y.

763 So. Los Angeles Street
Los Angeles 14, Calif.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance



● Beehive Brand Beeswax is 100% pure . . . uniform in texture, and white in color. Selected from the finest grades of crude beeswax, it is carefully tested for purity and uniformity before it is accepted and refined. After thorough processing and clarifying, it is sun-bleached to a high degree of whiteness.

● Uniformity of Beehive Brand Beeswax will keep your product always up to the high standard you set for it. The quality and uniformity never change. It is free from adulterants and imperfections of any kind. And back of every tablet of Beehive Brand Beeswax stands the reputation of the manufacturer.

Write Dept.D-12 today for complete information.

D1

BEEHIVE BRAND
Beeswax

WILL & BAUMER CANDLE CO., INC.
Established 1855
Buckley Road, Syracuse, New York
SPERMACETI CERESINE RED OIL YELLOW BEESWAX
COMPOSITION WAXES STEARIC ACID HYDISTEAR

READERS' QUESTIONS

HAIR DRESSING: On page 302 of the "Drug & Cosmetic Review" for 1942-43, you have a formula for a hair dressing calling for mineral oil 80, castor oil 2, and alcohol 18. I made an experimental batch, 10 ounces, placing the castor oil in the alcohol and than adding the light mineral oil. However, this does not stay in solution. Can you tell me what is wrong? Chicago.

A check of the original article as given in your letter indicates quite clearly that this is a two-layer type of preparation which requires shaking before use. The alcohol which is added to reduce the viscosity of the oils when applied to the hair, and thus assured a more uniform distribution of the oils. Evaporation of the alcohol leaves a thin coating of oil in the hair.

BRUSHLESS SHAVE CREAM: Please give us recipes for making a shaving cream for shaving without water. Denmark.

I presume that what you mean is what we call a brushless shaving cream. Many formulas are available for making these products in the new edition of "Modern Cosmetics" by Thomssen. From this text is cited the following brushless shaving cream made with lanolin:

Stearic acid (Triple pressed)	**25 lbs.**
Anhydrous lanolin	**3 "**
Alcohol (S.D. 3A)	**2 "**
Triethanolamine	**¾ "**
Borax	**½ "**
Glycerine	**3 "**
Water (distilled or softened)	**70 "**
Perfume	**4 oz.**

First melt the stearic acid and lanolin by indirect heat in the melting kettle. Pour the water into the mixing kettle and when heated dissolve the borax in a portion thereof. Add the borax solution and the triethanolamine to the hot water in the mixer. This has been heated to about 150° F. With the agitator running pour the stearic acid-lanolin mixture slowly into the mixing kettle; stir until smooth and the white emulsion has formed. Continue the stirring until the mass cools, then add the glycerine, alcohol and perfume.

MEDICATED HAIR POMADE: I take this opportunity to ask a favor. Will you please give me a formula for a hair preparation containing pilocarpine, sulfur, and cholesterol? Boston.

I think that the following pilocarpine hair pomade, suggested by Goodman, will meet your requirements:

Pilocarpine hydrochloride	**2**
Quinine hydrochloride	**4**
Sulfur, precipitated	**10**
Balsam Peru	**20**
Lanolin	**12**
Cocoa butter, enough to make	**100**

Dissolve the pilocarpine hydrochloride in a small amount of water, then incorporate the solution with the other ingredients. Cholesterol need not be added since it is present in the lanolin.

WAVE SET AND HAIR BLUEING: Several of our customers have written to us regarding a wave set which will not leave a white powder or flakes after the hair is dry. We have also had inquiries for a blueing for gray hair. We would appreciate your advising us if there is any standard formulas for the above, and if they are available to the industry. Cleveland.

An effective wave set which I think will meet your requirements can be prepared as follows:

Quince seed	**2 lbs.**
Glycerine	**2 lbs.**
Warm water	**8 gals.**
Alcohol	**1 gal.**
Sodium carbonate	**1 lb.**
Perfume	**1-16 oz.**

Wash quince seed thoroughly in cold water, then macerate in the warm water for about 24 hours and strain by gently pressing through cheesecloth. Dissolve the sodium carbonate in the warm water before adding to the quince seed. Then add glycerine and alcohol to which the perfume has previously been added. After this color the preparation any color desired.

With regard to your inquiry for a blueing for gray hair, I would suggest that you can use 0.15 per cent solution of aniline violet in water. Some of these rinses consist of a small quantity of aniline violet with the addition of citric and/or tartaric acid. These are usually mixed with a larger quantity of a soluble filling material, the composition to be diluted before use. The proportion of the dye in the solution when used on the hair should not exceed 0.15 per cent.

MILDEW CONTROL: Can you furnish us with methods for preventing dampness and mildew in closets and storage spaces? Miami

Mildew is due to moisture and is generally found where there is excessively high humidity. Mildew in closets and small storage rooms can be controlled by the simple expedient of raising the temperature and thereby lowering the relative humidity. This can be done by keeping a small electric light about 40 watts burning in the closet. Moisture control can also be obtained by the use of calcium chloride or silica gel. Calcium chloride takes up about twice its weight of water and becomes a thick solution. Means must be provided to catch the drippings and the calcium chloride must be renewed as it is used up. Silica gel takes up only about half its weight of water but does not go into solution and maintains its dry, granular appearance. It can be regenerated and used again after heating in a dry oven for several hours at 300-350° F.

UREA IN A HAND CREAM: Can you tell me what the recommended amount of urea should be in a hand cream? I would like to know what effect urea has in such preparations and where I could obtain further information on its use and actions. St. Louis.

About 3 per cent of urea is the recommended proportion for inclusion in hand creams. Urea is said to impart a smoothing and softening action to such products. Studies on urea in hand preparations were described in an article by H. Rattner which appeared in the *Archives of Dermatology and Syphilology*, 48:47, 1943. This publication can be obtained in any medical library in your city.

EXPORT EXPORT

ANETHOL N. F.
PURE, ODOR AND FLAVOR OF OIL OF ANISE

"GUM SYNTHOBENZOIN"
(SYNTHETIC GUM BENZOIN)
FIXATIVE PROPERTIES, CONSTITUENTS, ODOR, TASTE AND PURITY CLOSELY CORRESPOND TO THOSE OF THE NATURAL GUM BENZOIN OF THE SAME TYPE.

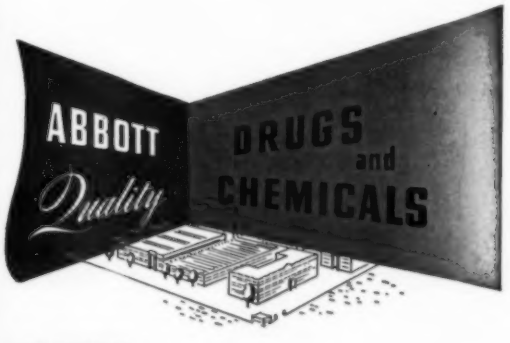
"PUROMINT"
SELECTED GRADE NATURAL PEPPERMINT EXTRACT (OIL)

"SYNTHOMENTHOL"
SYNTHETIC MENTHOL CRYSTALS HAVING COOLING EFFECT AND ODOR SIMILAR TO NATURAL MENTHOL

ESSENTIAL OILS — FLAVORING OILS
SPECIAL COMPOUNDS
VITAMINS • HORMONES

FINE CHEMICALS - PHARMACEUTICALS

BENDIX CHEMICAL CORPORATION
420 Lexington Ave. MUrray Hill 3-5821 New York 17, N. Y.
Cable Address: BENDIX CHEM



ANESTHETICS
Procaine Hydrochloride...Procaine Base...Benzocaine...
Procaine Borate...Butyl p-aminobenzoate

ANTISEPTICS
Acriflavine Hydrochloride...Acriflavine Neutral...
Proflavine Sulfate

HYPNOTICS
Phenobarbital...Phenobarbital Sodium

ALKALOIDS AND DRUG EXTRACTIVES
Ephedrine...Lobeline Sulfate...Podophyllin

For Quotations Address:
CHEMICAL SALES DEPARTMENT

ABBOTT LABORATORIES
NORTH CHICAGO • ILLINOIS

EXPORT MANAGER

wanted

By Chicago Manufacturer of Drug Specialities and Pharmaceuticals. Must have previous successful experience, wide acquaintance with foreign markets and be able to influence a volume of business which will justify earnings of $10,000.00 to $15,000.00 per year. For personal interview give full particulars of previous connections and business history. All replies kept in strict confidence. Our employees know of this ad.

Address: Box N-11
Drug & Cosmetic Industry
101 West 31st Street
New York 1, N. Y.

GUMS

TRAGACANTH

QUINCE SEED ARABIC KARAYA

GALL NUTS

D. S. DALLAL & CO.

261 Fifth Ave., New York 16

IMPORT MUrray Hill 3-8646 EXPORT

Cetyl, Oleyl, Stearyl

***Cachalot* fatty alcohols**

Send for data sheets:

MICHEL AND COMPANY, INC.
90 BROAD STREET • NEW YORK 4, N. Y.

CERTIFIED COSMETIC COLORS

Also

COSMETIC Inorganic Pigments

SUBMIT YOUR INQUIRIES

INTERSTATE COLOR CO., INC.
7 Beekman Street New York City

LUBRICATING JELLY AND VAGINAL PREPARATIONS: We should appreciate any help you can give us on the formulation of a lubricating jelly. We should also like to have specific information on the types and requirements for vaginal jellies and vaginal creams. Philadelphia.

With regard to your question on lubricating jellies I would suggest that you read the article on this subject which appeared on page 670 of the December 1944 issue of DRUG & COSMETIC INDUSTRY. Suitable lubricating jellies are also described in the "Pharmaceutical Recipe Book," from which is taken the following formula for a surgeons' lubricating jelly:

Tragacanth, in selected ribbons	**25.0 Gm.**
Boric acid	**12.5 Gm.**
Alcohol	**40.0 Gm.**
Glycerine	**80.0 Gm.**
Solution of formaldehyde	**4.0 cc.**
Methyl salicylate, 1% alcoholic solution	**40.0 cc.**
Water, sufficient to make	**1000.0 Gm.**

Macerate the tragacanth in the water, in which the boric acid has been dissolved. Strain through fine cheese cloth. Add the alcohol, glycerine solution of formaldehyde, methyl salicylate, and sufficient water to make the product weigh 1000 Gm., mix thoroughly.

With regard to vaginal preparations, I would suggest that you read the article on "Contraceptive Preparations," which appeared in our magazine for July, 1943, page 32. Considerable information on requirements and formulas of accepted products are given in the 1937 edition of "New and Non-Official Remedies," which is published for the American Medical Association by J. B. Lippincott Co., in Philadelphia. Chapter 12 is devoted to the subject in which you are interested.

COSMETIC JELLY: Before the war a preparation called Kaloderma made by Wolff & Son of Karlsruh, Germany, was imported into this country. It was a cosmetic jelly used to keep the skin in smooth condition and was made with glycerine and honey. It came in a tube and was transparent, crystal clear, colorless and squeezed out of a tube in a continuous ribbon. I would like to prepare a jelly of a similar nature. Could you give me any information or formulas which describes the making of a similar product? New York.

I am not familiar with the product mentioned in your letter, but perhaps something on the following order will serve as an experimental basis:

Tragacanth, white fine powder	**1.0**
Glycerine	**5.0**
Water	**94.0**

Grind the tragacanth with the glycerine, then add the warm water with stirring and in small portions. Stir until a homogenous paste is obtained. By varying the gum or water content the viscosity may be adjusted as required. I would also suggest that you try using a jelly base prepared with sodium alginate, because the viscosity of the gel can be controlled quite readily. Suitable quantities of glycerine can be incorporated if desired and other compatible agents may be included.

HAIR LACQUER FORMULATION: In your Reader's Question Department, could you give me suggestions on the formulation of hair lacquers? Philadelphia.

Hair lacquers consist of resins and similar substances designed to hold the ends of the hair in position. The essential fixatives are natural resins, though water-soluble synthetic resins such as glyceryl and glycol boriborates may also be useful. The base is alcohol, facilitating rapid drying. Resins should be chosen that give a hard and otherwise suitable film at ordinary temperatures, yet which will wash off fairly easily. Benzoin is probably the best—other suggested resins being rosin, sandarac, styrax, and mastic. A trace of deodorized castor oil may be useful as a plasticizer. Synthetic resins other than those mentioned have also been used but I should like to point out that a few years ago there were a number of cases of contact dermatitis from products made with such resins. A typical formula for such a product is as follows:

Gum benzoin	**25 parts**
Rosin	**12 "**
Deodorized castor oil	**2 "**
Perfume	**1 "**
Alcohol	**60 "**

GLYCERITE OF HYDROGEN PEROXIDE: Will you kindly furnish information on glycerite of hydrogen peroxide mentioned in your issue of May 1947? Manila.

This product is now being manufactured by International Pharmaceutical Corporation, 32 Newbury Street, Boston, Mass. Glycerite of hydrogen peroxide has been found to be a potent anti-bacterial agent and has undergone considerable study and investigation. It is a solution of 1.5 per cent of hydrogen peroxide as derived from 4 per cent of urea peroxide dissolved in anhydrous glycerine to which has been added 8-hydroxyquinoline (0.1 per cent) as a secondary stabilizer. Detailed information can be obtained from the following reports:

Thurman, F. M., and Brown, E. A.: "Effects of Glycerite of Hydrogen Peroxide on Infections of the Skin and Mucous Membranes," Archives of Dermatology and Syphilology, 55:801-809, June 1946.

Brown, E. A.: Abramson, H. A.; Gorin, M.; Kauffmann, H. O., and Shanley, E. C.; "The Stability of Urea Peroxide in Glycerol" J. Am. Pharm. A. (Scient. Ed.) 35:304-306, Oct. 1946.

Brown, E. A.: Krabek, W., and Skiffington, R.: "A New Antiseptic Solution for Topical Application:" Comparative in Vitro Studies, New England J. Med. 234:468-472, April 4, 1946.

Brown, E. A.: "Studies on Tissue Tolerance to a New Glycerol Peroxide Antiseptic Solution," Ann. Allergy, 4:33-39, Jan. Feb., 1946.

Brown, E. A., and Kelemen, G.: "The Use of Glycerite of Hydrogen Peroxide in Inflammatory Aural Conditions," Laryngoscope, 56:556-560, Sept., 1946.

Brown, E. A., and Owen, W. E.: "The Treatment of Chronic Purulent Otitis Media with Glycerite of Hydrogen Peroxide," Arch. Otolarying., 43:605-612, June, 1946.

I should like to point out that a patent covering glycerite of hydrogen peroxide was granted to E. A. Brown in November, 1947.

Use LABELS AND SEALS ..

FAITHFUL by SERVICE

JOHN HORN

835 - 839 TENTH AVENUE

NEW YORK 19, N.Y.

FOR OVER FIFTY YEARS

for greater sales appeal

METAL · EMBOSSED
ENGRAVED
DIE STAMPING FOR BOXMAKERS

TL Beeswax

- PURE WHITE
- EXTRA QUALITY
- ABSOLUTELY PURE
- ABOVE U.S.P. STANDARDS

Samples will gladly be sent on request—at no obligation.

Serving The Trade For 95 Years

THEODOR LEONHARD WAX CO., INC.

HALEDON, PATERSON NEW JERSEY

Western Distributor: A. C. Drury & Co., 219 E. North Water St., Chicago, 11, Ill.

MOULDS

For
LIPSTICKS
MASCARO
SUPPOSITORIES
STYPTIC PENCILS

and DIES for ROUGE
COMPACT POWDER

Write for Catalog

A. CAVALLA, INC. 163 West 18th Street, NEW YORK, 11, N.Y.

Professional Service

THE COLUMBUS LABORATORIES
Analytical and Consulting Chemists
Bacteriologists
We have been solving problems pertaining to foods, drugs and cosmetics since 1893.
33 N. STATE ST. CHICAGO, ILL.

H. A. Sam., Ph.D. E. B. Putt, Ph.C., B. Sc.
SEIL, PUTT & RUSBY, Inc.
Analytical and Consulting Chemists
Formerly Experts for U. S. Dept. of Agriculture
Analyses Made Formulas Developed
Research Investigations Conducted
Specialists in the Analysis of
Beverages Essential Oils
Flavoring Extracts Toilet Preparations
Foods Spices Drugs
Proprietary Medicines Special Formulas
Pyrethrum, Rotenone and other Organic Insecticides
Lab's: 16 East 34th St. New York, N. Y.
Telephone MUrray Hill 3-6368

Consult
Z. H. POLACHEK
Reg. Patent Attorney
1234 BROADWAY (At 31st)
New York 1, N. Y.
Phone: LO. 5-3088

GEORGE W. PEGG, PH. C.
CONSULTANT
Drugs — Cosmetics — Industrial Alcohol
Flavoring Extracts
Labeling — Formulas — Processes
152 West 42nd St., New York 18, N. Y.
Telephone Wisconsin 7-3066
Washington Address: 2121 Virginia Ave., N.W.
Washington 7, D. C. c/o Dr. George W. Hoover

*ARLINCO RESEARCH LABORATORY, INC.
Research, Formulation and Application to the Industry.
Ethical Pharmaceuticals, Drugs, Cosmetics and Perfumery.
333 W. 52nd St., New York 19, N. Y.
Circle 6-7324
* A-R-L-Inco means: Applied Research Laboratory, Incorp.

MARKET RESEARCH
on Chemical Products
BJORKSTEN RESEARCH LABORATORIES
185 North Wabash Avenue
Chicago 1, Illinois
ANDover 1726

Member Soc. Cos. Chem.
DR. H. SALFIELD
Consulting Laboratory
for the Manufacture of
Cosmetics and Pharmaceuticals
19 Valley Road White Plains, N. Y.

Classified

Machinery for Sale

FOR SALE: 1—Fitzpatrick Style D Comminutor; 4—Rotex Sifters; 1—Samco Jr. 7 Spout Vac. Filler; 1—Karl Kiefer Vari-Visco Filler; 17—Stokes Single and Rotary Tablet Machines, from ¼" to 2½"; 10-12" Belt Conveyors, 10' to 50'; 6—1000 Powder Mixers; 8—Stainless Steel Kettles, 60, 80, 100, 150, 300 gal.; 12—Stainless Steel Tanks, 100 to 1500 gal.; Powder and Liquid Filling Machines; Burt, World, National Can and Bottle Labelers; Filters; Pumps; etc. Complete bulletin on request. We buy your surplus equipment. Brill Equipment Company, 225 West 34th Street, New York 1, N.Y.

EQUIPMENT FOR SALE: Kiefer 24 spout and U. S. 22 spout Vacuum Fillers; Alsop and Scientific hand Vacuum Fillers; U. S. 8 spout Siphon Filler; Resina Std. Single Head Capper; U. S. Single Head Capping Machine; World and McDonald Straight-away front and back labelers; World Rotary Labeler; Ermold and World semi-automatic Labelers; Potdevin 6 label Pasters; Republic Flex-master Filter; Sperry Filter Press; U. S. Multiple Disc Drum Filters; Filters; Tanks. Above is a partial list, advise your requirements. We buy and sell complete equipment for the industry. Seifert Machinery Co., 1433-47 N. 12th St., Phila. 22, Pa.

FOR SALE: Standard Automatic "Samco Jr." Vac. Bottle Filler; Buffalo Vac. Drum Dryer 24" x 20"; Abbe Pebble Mill 24" x 36", 30 gals.; Stokes Vert. High Vac. Pumps; Manton-Gaulin Stainless Steel Homogenizers; Devine No. 3 Vac. Shelf Dryers; Knapp Can Labeler; Stokes & Smith & Day Powder Fillers; Triangle Box Sealers & Carton Gluers, also Wrapping Machines; Colton No. 5 Paste Filler; Edson 6 & 8 spout siphon bottle Fillers; Stokes & Colton Tablet Machines ½" to 1-3/16"; Day & Robinson Dry Mixers 50 to 2500 lbs.; Sharples No. 5A Stainless Steel Centrifuges; Sperry & Shriver Filter Presses 18" x 42"; New Stainless Steel Alum. & Copper Jack. Kettles, 30 to 500 gals.; New Portable Elec. Mixers ¼ to 2 HP; Pumps; Mixers; Filters; Grinders; Crushers & Pulverizers; Sifters; Stills; Soap Machinery; etc. We buy your surplus equipment. Stein Equipment Co., 90 West Street, New York 6, N. Y.

FOR SALE: Day 15 Gal. Pony Mixer, M. D.; Day 40 Gal. 2 Speed Pony Mixer, M. D.; Day 80 Gal. Brighton Mixer, M. D.; Stokes & Smith Model G1 Universal Powder Fillers; Single Punch and Rotary Tablet Machines, Stokes & Colton for tablets from ¼" up to 2½" dia.; Gump Triple Screen Sifter, 3½' x 6'; Day Dry Powder Mixers, 200 lb. up to 5000 lb. cap.; Steel Roller Conveyor 18" to 30" widths; Eppenbach V-8 S. S. Colloid Mill; Premier 10" Paste Mill; Sharples Super Centrifuges, S. S. Bowls. Send for Bulletin A-19 Listing Agitators, Stainless Steel Tanks, Jacketed Kettles, Labelers, Conveyors, etc. We buy your surplus. The Machinery & Equipment Corp., 533 West Broadway, New York 12, N. Y.

First, Check with First for good equipment. Large stock of Tablet Presses, Stokes, Colton and Klux; Stainless Steel Mixers, Kettles, Tanks, Evaporators, Dryers, Extractors, Centrifugals, Colloid Mills, Pulverizers, Filling and Labeling Equipment, Wrapping and Packaging. Send for First Facts just out First Machinery Corp., 157 Hudson st., New York 13, N. Y.

FOR SALE: Dry Powder Mixers 600 lbs., 1200 lbs., 2000 lbs., 9-World or Ermold Semi-automatic Labeling Machines; 2-World Rotary Automatic Labellers, motor driven, late serial number; 1-Stokes 79-80 Filler, Closer, Clipper, motor driven; 60-Stainless Steel, Aluminum, Copper, Glass lined, jacketed Kettles, some agitated; 2-Stokes "R" single punch Tablet Machines, 2½" dia., 7-Stokes, "F", ¾"; 1-Karl Kiefer Rotary 8 Spout Vacuum Filler; 14-Copper percolators, 20" to 36" dia.; 1-No. 2 DH Micro-Pulverizer, 4-No. 1 SH; 66-Tanks; 26-Stainless Steel, 250, 320 gal.; 40 Aluminum 800, 650 and 250 gal. Send for latest copy of Consolidated News listing complete stock. We buy your surplus equipment. Consolidated Products Co., Inc., 20-21 Park Row, New York City 7, N. Y.

BOTTLE WASHER: Caustic, and clear rinses! Dries bottles at 100 per minute. Can handle any size bottle up to about 16-ounces. Three years old. W. G. Meier, Wyeth Incorporated, Mason, Michigan.

Machinery Wanted

HIGHEST PRICES PAID FOR GOOD EQUIPMENT. FIRST MACHINERY CORPORATION, 157 Hudson St., New York 13, N. Y.

Machinery Wanted

GET MORE FOR YOUR SURPLUS EQUIPMENT: List it with our bureau and sell directly to the next user. 50,000 manufacturers get our offerings regularly. They need such units as Fillers, Mixers, Labelers, Tablet Machines, Pharmaceutical Equipment, or what have you to sell. For quicker action and better price, send full details and your price to Equipment Finders Bureau, 6 Hubert St. New New York 13, N. Y.

WANTED: A good used Viscolizer or homogenizer. Give size, make, price and condition in first letter. Box D-7, DRUG & COSMETIC INDUSTRY.

Help Wanted

Manufacturers' agents wanted calling on Cosmetic, Perfume and Soap manufacturers in the Chicago and New England territories, to handle full line of Perfume Compounds and Raw Materials. Write giving full particulars. D-2, DRUG & COSMETIC INDUSTRY.

COSMETIC CHEMIST: Opportunity for the right man to take full charge of formulation, control and production of creams, powders, lotions, etc. for a well-known household line, with world-wide distribution. Headquarters in Middle-west. State age, qualifications, background and education. Write D-4, DRUG & COSMETIC INDUSTRY.

EXPERIENCED FLAVOR MAN wanted. Thoroughly familiar with the manufacture and use of imitation flavors. Box D-10, DRUG & COSMETIC INDUSTRY.

Situations Wanted

GRADUATE CHEMIST: 14 years of experience in the soap and cosmetic industry. Thoroughly familiar in Soap and Cosmetic manufacturing, production, formulation, products research and development desires connection with a progressive firm as research and development, production, formulation or analytical or as chief chemist. Box D-3, DRUG & COSMETIC INDUSTRY.

SALES EXECUTIVE seeks to represent supplier or suppliers to perfume, cosmetic and allied industries. Excellent buyer contacts having served the trade for 18 years. Thoroughly conversant all phases packaging, design, formula. Aggressive, responsible. Capable of leading sales organization. Desirous locating New York City. Travel if necessary. All correspondence strictly confidential. Box D-5, DRUG & COSMETIC INDUSTRY.

COSMETIC CHEMIST: Experienced in purchasing, conducting and supervising production control and new product development, handling production and packaging problems, instituting new laboratory and manufacturing procedures. Box D-6, DRUG & COSMETIC INDUSTRY.

Business Opportunities

CHEMIST-EXECUTIVE, 15 years heavy experience (technical and sales) in essential oils, perfume and flavor oil compounds. Well versed in all phases of the business. Wishes to purchase outright or interest in going perfume oil, essential oil, flavor business. Box D-8, DRUG & COSMETIC INDUSTRY.

Filling, labeling and packaging concern wants partner to help finance to manufacture and expand a complete line of drugs, cosmetics and etc. in the metropolitan area. A drug or cosmetic chemist preferred. Write Box D-1, DRUG & COSMETIC INDUSTRY.

INVENTORY CLEARANCE: Stainless Steel Pots, 6 gallon, 3 ply, seamless, 14" diam. 10" deep, S/S side handles, 2 to carton, $14.00 each. Write for circulars on stainless and aluminum utensils. Anchor Equipment Co., Inc., 14 Cooper Square, New York 3, N. Y.

Approximately twelve thousand 1½ oz. bottles, unusual in design, packed in cartons of twelve. Design patent and mold. Mrs. Alexander Marcus, 18 Robin Road, West Hartford 7, Conn.

Veegum

Magnesium
Aluminum Silicate

A hydrophyllic colloid forming high viscosity gels at low solids.

R. T. VANDERBILT CO., Inc.
Specialties Department
230 PARK AVE., NEW YORK 17, N. Y.

For Butter Type Flavors
Diacetyl, Acetyl Propionyl
Acetyl Iso-Butyryl
Acetoin

For Pineapple Imitations
Allyl Caproate, Allyl Caprylate
Allyl Heptoate

FAIRMOUNT CHEMICAL CO., Inc.
Manufacturers of Flavor and Perfume Chemicals
600 Ferry Street NEWARK 5, N. J.

POLAK & SCHWARZ, INC.
667 Washington St. New York 14, N. Y.

Perfume Bases
Compositions and Specialties
Essential Oils Flower Oils
Terpeneless Oils Aromatic Chemicals
Ethers and Esters
Flavors and Extracts

FOOD RESEARCH LABORATORIES, INC.
Founded 1922
PHILIP B. HAWK, PH.D., *President*
BERNARD L. OSER, PH.D., *Director*
RESEARCH ◆ ANALYSES ◆ CONSULTATION
Biological, Nutritional, Toxicological Studies
for the
Food, Drug and Allied Industries
48-14 33rd Street Long Island City, New York
Write for descriptive brochure—mentioning this publication

SEYDEL

BENZOIC ACID U. S. P. and Tech.
BENZYL ALCOHOL F. F. C.
BENZYL BENZOATE 98-100%
ETHYL AMINO BENZOATE U.S.P.
SODIUM BENZOATE U.S.P.
TERPIN HYDRATE U.S.P.
Booklet describing "Seydel" fine chemicals available on request.
SEYDEL CHEMICAL COMPANY
Established 1904 JERSEY CITY 2, N.J. Cable Address "SIZOL"

MOULDS
LIPSTICK • SANITARY LIPSTICK
• STYPTIC PENCILS •
SUPPOSITORIES • MASCARA
PROGRESSIVE MACHINE WORKS
137 West 22nd St., New York 11, N. Y.
ROUGE • COMPACT POWDER
also
PUNCHES FOR TABLETS
DIES

falba
Reg. U. S. and Foreign Countries
ABSORBS 5 TIMES ITS WEIGHT OF WATER
THE ORIGINAL ABSORPTION BASE
Write for suggested formulae
Pfaltz & Bauer, Inc.
EMPIRE STATE BLDG., NEW YORK 1, N. Y.

ALL GRADES OF
REFINED GLYCERINE
U. S. P. B. P.
YELLOW DISTILLED
HIGH GRAVITY
DYNAMITE
REFINERIES LOCATED AT
★ Brooklyn, N. Y.
★ Jeffersonville, Ind.
★ Jersey City, N. J.
★ Berkeley, Calif.
★ Kansas City, Kans.
COLGATE-PALMOLIVE-PEET CO.
GLYCERINE DEPT. • 105 HUDSON STREET
JERSEY CITY 2, NEW JERSEY

more and more

WITCO STEARATES

to meet increasing demands

The unusual properties of the metallic salts of stearic acid result in the almost daily discovery of new uses.

To supply this increasing demand Witco has constructed in Chicago, and is now putting into operation, an additional plant which ultimately will double the capacity of its Brooklyn plant.

Shipments can now be made either from New York or Chicago.

Quality STEARATES for over a quarter of a century

ALUMINUM • BARIUM • CALCIUM • LEAD • LITHIUM • MAGNESIUM • SODIUM • ZINC

Samples on Request

WITCO CHEMICAL COMPANY

MANUFACTURERS AND EXPORTERS

295 MADISON AVENUE · NEW YORK 17, NEW YORK

LOS ANGELES • BOSTON • CHICAGO • DETROIT • CLEVELAND • AKRON
SAN FRANCISCO • LONDON AND MANCHESTER ENGLAND

ADVERTISING INDEX

Abbott Laboratories 855
Advanced Cosmetics, Inc 735
Albek, Inc., Albert 818
Alsop Engineering Corp. 806
Aluminum Company of America ..... Insert Bet. 772-773
Aluminum Seal Co. ..... Insert facing 804
American Cholesterol Products, Inc. 818
American Cyanamid Company ..... Insert facing 732
Anchor-Hocking Glass Corp. ..... Insert facing 776 and 780
Armstrong Cork Co. ..... Insert facing 769 and 773
Atlas Powder Co. 722
Avon Allied Products, Inc. 727
Baker Chemical Co., J. T. ..... Insert facing 788
Baum, Edward J. 832
Beauty Fashion 780
Bendix Chemical Corp. 855
Benzol Products Co. 840
Bernardin Bottle Cap Co. 786
Braun Company, W. 827
Bridgeport Metal Goods Mfg. Co. 777
Brockway Glass Co., Inc. 770
Broder Industries, Inc. 782
Brown Bag Filling Machine Co. 808
Bush Aromatics, Inc. 844
Bush & Co., W. J. 836
Calco Chemical Division 742
Calif. Fruit Growers Exchange ..... Insert Bet. 732-733; 826
Carbide & Carbon Chem. Corp. ..... Insert facing 820
Carr-Lowrey Glass Co. 776
Cavalla, Inc., A. 857
Chaleyer, Inc., Ph. 816
Chem-Arom Co., The 836
Chemical & Process Machinery Corp. 810
Chrystal & Co., Charles B. 838
Coby Glass Products Co. 811
Colgate-Palmolive-Peet Co. 859
Colton Co., Arthur 810
Commercial Solvents Corp. 744
Crown Cork & Seal Co. 784
Crystal Plastics, Inc. 773
Dallal & Co., D. S. 856
Danco, Inc., Gerard J. 726
Devold Oil Co., Inc., Peder 816
Dodge & Olcott, Inc. ..... Insert facing 721
Dodge Cork Company 783
Duche & Sons, Inc., T. M. 834
duPont de Nemours & Co., E. I. ..... Insert facing 728
Durlin Corp. ..... Insert facing 725
Economic Machinery Co. 850
Eppenbach, Inc. 809
Ertel Engineering Corp. 824
Essential Aromatics Corp. 739
Ever Ready Label Corp. 836
Exact Weight Scale Co. 845
Fairmount Chemical Co., Inc. 859
Felton Chemical Co., Inc. 740
Filler Mfg. Company 811
Filter Paper Co. 852
Fine Organics, Inc. 840
Firmenich & Co., Inc. ..... Insert facing 720
Florasynth Labs., Inc. ..... Insert facing 789
Food Research Laboratories, Inc. 859
French, Inc., Berj. 822
Fritzsche Bros. ..... Insert between 828-829
Gair Co., Inc., Robert ..... Insert bet. 784-785
Gardner-Richardson Co. ..... Insert facing 777
General Chemical Division ..... Insert facing 744
General Drug Co. 838
Gesell, Inc., R. 834
Givaudan-Delawanna, Inc. ..... Insert bet 720-721; 814
Goldschmidt Chem. Corp. ..... Insert facing 740
Greeff & Co., R. W. 827
Gunning & Gunning 836
Hagerty Bros. & Co. 808
Hazel-Atlas Glass Company ..... Insert facing 768
Hema Drug Co., Inc. 834
Heyden Chemical Corp. ..... Insert bet. 796-797
Hoffmann-LaRoche Inc. 830
Hooker Electrochemical Co. 723
Hormann & Co., F. R. 811
Horn, John 857
Hovenden & Sons, Ltd., R. 779
Hubbert & Son, Inc., B. H. 810
Huisking & Co., Inc., Chas. L. 816
Industrial Chemical Sales ..... Cover 2
Inland Alkaloid Co. 826
Interstate Color Co., Inc. 856
Intramed Co., Inc. 832
Jelly & Co., Walter H. 826
Kachurin Drug Co. 819
Katz & Co., Dr. Alexander 739
Kelton Cosmetics Co. 853
Kessler Chemical Co. 818
Kimble Glass ..... Insert facing 797
Kohnstamm & Co., H. 738
Kolmar Laboratories ..... Insert facing 812
Koster-Keunen Mfg. Co., Inc. 822
Lanatex Products Sales Company 838
Lemke & Co., B. L. 832
Leonhard Wax Co., Theodor 857
Lueders & Co., George ..... Insert between 740-741
Lusteroid Container Co. 847
Magnus, Mabee & Reynard, Inc. 731
Mallinckrodt Chemical Wks. ..... Insert facing 745
Mantrose Corp., The 824
Merck & Co., Inc. 725
Metal-Glass Products Co. 806
Michel & Company, Inc., M. 856
Monsanto Chemical Co. ..... Insert bet. 740-741
Monsanto Plastics ..... Insert facing 781
M. R. M. Company 808
National Can Co. 778
Naugatuck Aromatics 790
Neumann, Buslee & Wolfe, Inc. 840
New England Collapsible Tube Co. 717
New Jersey Machine Corp. ..... Insert facing 805
New Jersey Zinc Co. 843
N. Y. Quinine & Chemical Works 734
Norda Essential Oil & Chemical Co., Inc. ..... Insert facing 724
Norton Laboratories, Inc. ..... Insert between 772-773
Orbis Products Corp. 721
Owens-Illinois Glass Co ..... Insert facing 772
Oxzyn Company 794
Palm Fechteler Co. 840
Parento Co., Compagnie ..... Insert facing 813
Paris Cosmetics, Inc. 724
Parsons Imports, M. W. 819
Penick & Co., S. B. ..... Insert bet. 796-797; 730
Pennsylvania Glass Products Co., Inc ..... Insert facing 741
Pennsylvania Refining Co. ..... Insert bet. 744-745
Pfaltz & Bauer Co., Inc. 859
Pfizer & Co., Inc., Chas. ..... Cover 4
Plaskon Division (Libbey-Owens-Ford) 797
Polak & Schwarz, Inc. 859
Potdevin Machine Co. 827
Powell & Co., Inc., John 814
Prentiss & Co., R. J. 846
Progressive Machine Works 859
Purocaine, Inc. 848
Richford Corp. 842
Robert, Inc., Henri 736
Robinson Wagner Co. 728
Rohm & Haas Company 832
Ross, Co., A. H. 807
Roure-Dupont, Inc. ..... Insert facing 821
Santoine Company of America, Inc. 816
Schimmel & Co., Inc. 720
Seeley & Co., Inc. 834
Seydel Chemical Co. 859
Sheffield Farms Co., Inc. 743
Sonneborn Sons, Inc. 737
Standard Cap & Molding Co. 785
Standard Oil Co. (Indiana) 719
Standard Pharmacal Co. 827
Starton Laboratories, Inc. 849
Stokes Machine Co., F. J. 798
Stokes & Smith Co. 802
Stores Publishing Co. 774-775
Strong, Cobb & Co., Inc. 741
Sturge Ltd., John & E. ..... Insert facing 729
Summit Chem. Products Corp. ..... Insert facing 796
Swindell Bros., Inc. 766
Synfleur Scientific Labs., Inc. ..... Insert bet. 744-745
Syntomatic Corp. 732
Thurston & Braidich 826
Tombarel Products Corp. ..... Insert facing 733
Totus Mfg. Co., Inc. 781
Triangle Package Machinery Co. 809
Ungerer & Co., Inc. ..... Cover 3
Union Carbide & Carbon Corp. ..... Insert facing 820
U. S. Automatic Box Machy Co. 800
U. S. Bottlers Machinery Co. 802
U. S. Industrial Chemicals, Inc. ..... Insert bet. 792-793
van-Ameringen-Haebler, Inc. ..... Insert bet. 724-725
Vanderbilt Co., R. T. 859
Van Dyk & Co. ..... Insert bet. 732-733
Warwick Chemical Company 729
Welch, Holme & Clark, Inc. 851
Wigton-Abbott Corporation 838
Will & Baumer Candle Co. 854
Witco Chemical Co. 860
Wolf & Co., Jacques 824
Zimmerman Incorporated, W. F. 733

DRUG AND COSMETIC INDUSTRY

Index Vol. 61 — July-December 1947

Abbott Labs.—665.
Acetphenetidin—25.
Ackerman, Philip C.—706.
Ackley, Robert R.—209.
Advertising, Cooperative—473; Awards—475; Sex Hormones and—595; Budgets for 1948—617; FTC Warns—746.
Aerosporin and Whooping Cough—825.
After Shave Lotion—565. Air Radio Inc.—496.
Alcohol Plant in Canada—305; Short—602.
Aldo Chem. Corp.—71.
Alexander, A.—493.
Alexander, Paul—497.
Alginates in Drug and Cosmetics, by M. A. Lesser—760.
Allen, M. N.—493.
Allergy Fund—302, 596.
Alsobrook, A. L.—351.
Aluminum Hydroxide Gel—525; Salt—677.
Ambergris and Substitutes—109. In Perfume Extracts, by Victor Hasslauer—458.
Amer. Air Filter Co. Inc.—801.
Amer. Chem. Society—165.
Amer. Costing Mills Inc.—349
Amer. Dental Assn.—450.
ADMA—33, 71, 496.
Amer. Foundation for Pharm Ed.—162.
Amer. Med. Assn.—594, 597.
Amer. Pharm. Assn.—303, 449, 749.
Amer. Pharm. Mfg. Assn.—162, 594. Amer. Soc. of European Chem. And Pharm.—637.
Amer. Soc. of Perfumers—495.
Amidone—163.
Amino Acids—163.
Ammonium Salts—524.
Amphetamine—680.
Amphogel Mark—165.
Ampules, Glass Particles in—820.
Amsco Packaging Mach. Inc.—795.
Analgesics—817.
Anderson, Gen. Frederick L.—341.
Anderson, H. R.—208.
Antacids for Peptic Ulcers—104.
Anticoagulants, The, by M. A. Lesser—178.
Anti-Dandruff Sol.—383.
Anti-Malarial Patents—25.
Antiperspirant Patent—101.
Antivivisectionists—595.
Applezweig, Norman—207.
Arens, Egmont—328.
Armour & Co.—450.
Armour Toiletries—771.
Armstrong Cork Co.—68.
Aromatics Course—212.
Aschenberger, Rudolph—643.
Associated Prod. Inc.—76, 341, 643, 788.
Astra Pharm. Prod. Inc.—645.
Astringent Lotions—679.
Atabrine—681.
Athlete's Foot Prod.—381. Atlas Powder Co.—340
Atom Science—747.
Avon Prod. Corp.—211, 344.
Ayer, Inc., Harriet Hubbard—203, 492, 616.
Ayers, William A.—163.
Ayerst, McKenna & Harrison Ltd.—205.

Bacitracin—27.
Bacon, R. F.; G-4 For Bovine Ringworms—462.
Bailey, A. H. A.—351.
Baizer, Dr. Manuel M.—203.
Baker Chem. Co., J. T.—496.
Baker Co., Harold W.—359
Bander, I. H.—789.
Barbiturates, N. Y. Restricts—26.
Barlow-Maney Labs. Inc.—497.
Baruch, Bernard M.—746.
Batson, John T.—205.
Bauer, R. L.—492.
Baybank Pharm. Inc.—639.
Bayer Co.—450.
Beauty Counselors Inc.—71.
Beauty Masks, European—820.
Bell, Frank F.—348.
Benadryl—232; For Ivy Poisoning—240; 673; For The Common Cold—825.
Bennett, Ira—789.
Bensinger, C. G.—640.
Benzedrine—241.
Benzoin, Sumatra—244.
Berg, F. F.—351.
Best, Samuel M.—76.
Beyer, Dr. Karl H.—205, 348.
Bill, John—645.
BIMS—495.
Bjorksten Labs.—67, 343.
Blake, George H.—796.
Bland Corp., Lee C.—497.
Blaw-Knox Co.—212.
Blood Sub., Russian—105.
Blue, E. B.—84.
Blumberg, Dr. Harold—787.
Boberg, Stanley G.—641.
Bois de Rose—176.
Bombi—619.
Bonne Bell—620.
Boric Acid—100, 164.
Boronia Megastigma—384.
Bortz, Dr. Edward L.—73.
Bouge, M. E.—499.
Bourjois—48, 53.
Bovine Ringworms, G-4 For, by R. E. Horsey and R. F. Bacon—462.
Bowie, Robert J.—643.
Boyer & Sebastian—795.
Boyer, John W.—795.
Boykin Bill—369.
Bradshaw, G. G.—341.
Brand Names Found.—745.
Brewster, Ray—347.
Brinken, J. W.—788.
Bristol Labs. Inc.—349, 491.
Bristol Labs. Ltd.—645.
Bristol, Mary Lee—212.
Bristol-Myers Co.—343, 795.
Bristol, W. M.—639.
British View on Patents—672.
Brockway Glass Co.—347.
Brooks Rotameter Co.—357.
Brown, David R.—490.
Brown, Robert B.—647.
Bruno, Court—499.
Bryan, Charles C.—205.
Bubbling Bath—711.
Buchu Oil and Diosphenol—828.
Buckeye Labs. Corp.—220.
Budd, Henry A.—344.
Buffovak Equip. Div., Blaw-Knox Co.—83.
Burbage, Dr. Joseph J.—73.
Burden, W. C.—648.
Burgin, Miller—544.
Burns, James—490.
Burrell & Neidig Inc.—795.
Burroughs Wellcome—496.
Burt, David S., Can Cavalcade—168, 313.

Cake Make-Up—237, 524.
California Fruit Growers Ex.—343, 645.
Camilli, Albert & Lahue, S. A.—64.
Camilli, Francois—640, 793.
Camphor Cream—565.
Can Cavalcade, by David S. Burt—168, 313.
Canaday, W. D.—497.
Cancer Solution Uncertain—304.
Carlova Inc.—493.
Carnarius, Edwin H.—203
Caron—620.
Caronamide—681.
Carroll, Dr. Richard—791.
Case Co., A. T.—357.
Cassia and Cinnamon Oils—108.
Cedrus Atlantica, Oil of—533.
Centaur Co.—693.
Central Pharm. Co.—496, 643.
Chain Druggists Profits—472.
Chaleyer, Ph.—71, 645.
Chamberlain, Edgar—205.
Charbert, Parfums—328.
Charles of the Ritz vs. Arden—667.
Charlesworth—72.
Chem. Exposition—451.
Chem. Industry, New Horizons for the—306.
Chem. Salesmens Assn.—73.
Chem. Specialties Co.—348.
Chemo Puro Mfg. Corp.—492.
Cherry Vehicle—237.
Chicago Drug & Chem. Assn.—793.
Chichester, Dr. D. F.—491.
Chintala, Charles—347.
Chiris Co. Inc., Antoine—791.
Christmas Buying—48.
Cincinnati Drug & Chem. Assn.—643.
Cinnamalhyde, Determination of—828.
Cinnamon Leaf Oil—384.
Ciro—188, 476.
Citro Chem. Co.—211, 499.
Clarke Distilleries Ltd.—69.
Clark, Stanley I.—69, 73.
Cleansing Powder—525.
Clo-Scent Inc.—771.
Clove, Wild—244.
Coblentz, Pierre A.—211.
Cobrain, J. B.—496.
Cocci Infection, Conatting—672.
Cochran, Jacqueline—771.
Coghill, Dr. R. D.—209.
Cohn, Samuel—212.
Cold Wave—26.
Cole, John—772.
Coleman, Stewart W.—211.
Colgate-Palmolive-Peet—491, 771.
Cologne—49.
Colson Equip. & Supply—804.
Commercial Alcohols Ltd.—305.
Commercial Solvents Corp.—792.
Construction Costs—80.
Consumer Acceptance, Predicting—469.
Control Procedures, by Erwin Di Cyan—38.
Cook, Dr. A. S.—205.
Corday—328.
Cosmetic Business, How to Start a, by Frazer V. Sinclair—30; Inventories—162; Sales Outlook—185; Creams, Tech. Data—237; Sales and Ess. Oils—301; Survey—327; Are Big Business—454, 471; Shows—472; Clinic for—600; Segregation—615; Tax—641; Qualification for Chemist—763; Jelly—856.
Cosmetic Chemists, Society of—491, 644, 788.
Cost Reduction—505.
Coty to Repackage—26, 53, 620.
Coughlin, Wallace E.—209.
Coutin, Pierre—73.
Cuba Pharm. Regulations—93.
Cullen, Dr. Frederick J.—164, 449.
Cullinane, Michael J.—792.
Cutter Labs.—305.
Cutter Labs. International—302.
Cyprus Ess. Oil Ind.—109.

Daggett & Ramsdell—325.
Dana Perfumes—53, 228.
Danco, Gerard J.—499, 793.
D'Ancona, B.—211, 643.
Darnell, James R.—707.
Date Palm Pollen—381.
Davis, Dr. Raymond Jr.—347.
Davis, Sidney—495.
DDT—164, 815, 817.
Dealy, Francis X.—648.
Dean, Donald—349.
Dedrick, Alec J.—499.
Degas, Perfum—619.
Degener, Fritz—651.
de Hoyos, Luis—499.
DeLamar, Hendrey Chem. Co.—205.
DeLamar, Robert A. M.—205.
DeMarkoff—51, 184.
Demonstration vs. Segregation—767.
Dempsey, William L.—493.
de Navarre, Mission G.—71, 491.
Dennis, E. B. Jr.—72.
Dental Lab. Assn.—483.
Dentifrices and Vitamins—288.
Depilatory, New—216, 243; Patent Decisions—597; Chemical—675.
DePree, Edward J.—348.
Deodorant Cologne—107, 712.
Detail Men, Selecting—464.
Detailing to Doctors—311.
Detergents, Synthetic—164, 317
De Vries, Charles—211.
De Walt, Jr., Harry—347.
Diapene—594.
Di Cyan, Erwin, Control Procedures—38.
Diebold, A. Richard—497
Dietel, Herman J.—788.
Discoloration Problem—752.
Dodge & Olcott Inc.—645, 793

Dodge, Lillian S.—203.
Doerr, George V.—73.
Dreyer Co., P. R.—793.
Drug Research, More—26; Sales—27; Exports—29; and Chem. Exports, The Future of Amer., by Earl I. McClintock—36; Ass. Chain Store—161; Advertisers—165; Market, The Growing—166; Administration, Separate—305; and Oil Plant Conference—450; and Cosmetic Prices, Postwar—594; Prices—748.
DCAT—29, 305, 489, 497.
Drug, Chem. & Allied Trades Assn. of St. Louis—491.
Drug & Chem. Export Club—795.
Duct Insulation—653.
Duff, T. O.—793.
Dunbar, Guy S.—639.
Dunn, Charles Wesley—303.
Dunney Sr., W. H.—495.
Durlin—348.
Duvelie Labs.—772.
Dyar, Clay B.—648.
Dyer, E. Russell—341.
Dyke, George F.—791.

Ebrey Chem. Works—207.
Eck, John R.—73.
Eger, Charles F.—208.
Eisler Eng. Co. Inc.—799.
Emerson Drug Co.—499.
Endo Prod.—792.
Enjay Co. Inc.—348.
Epidemics—451.
Ess. Oil Comp., Water Dispersal—233; Congress—684; Jap. Studies of—245, 533; and Dollar Credits—302.
Estrogen Creams—230, 593; Synergism—825.
Ethyl Carbonate and Prostatic Cancer—529.
Eucalyptus Oil, Indian—245; Turkish—684.
Ewing, Oscar R.—301.
Expansion in the Industry—461.
Eye Lotion—679, 839.

Faberge—772.
Face Lotions—100; Liquid—376; Powder, Particle Size in—675.
Fall Business, Est.—325.
Fair Trade and Prices—47; and Surplus Goods—593.
Fairchild & Co., E. B.—83.
Falstrom Co.—805.
Fardig, Dr. Oliver B.—68.
Farnsworth, Hugh A.—789.
Farrell, T. R.—491.
FDA on Labeling—25; Guarantees under the—26; Phamphlet on Importers—28; Separate Circulars and the—746.
Fed. Security Admin.—301.
Fed. Trade Comm.—25, 161, 162, 164, 303; States Policy—319; 596; Back Seizure Amendment and More Pay for—747; Inspects Advertising—748.
Fed. Whl. Drug Assn.—26, 643.
Feinstone, Dr. W. H.—204.
Feirer, Dr. W. A.—493.
Felton Chem. Co. Inc.—792.
Financial Reports—27.
Finn, Dr. Sydney B.—453.
Firmenich & Co.—496.
Fischelis, Dr. Robert P.—749.
Fischer, William F.—793.
Fishbein, Fannie—212.
Fisher, Hart U.—349.
Fiske, Garland—208.
Fistere, Joseph—208.
Fitch Asks Trade Conference—28.
Flashburn Cram.—373.
Fleming, Sir Alexander—348.
Fleuroma Inc.—495.
Florasynth Labs. Inc.—209.
Fluorine—453; and Teeth, by M. A. Lesser—611.
Folic Acid, Synthetic—105; 164; 380.
Food, Drug and Cosmetic Bar Assn.—303.
Food Prices—304.
Foot Powder—525.
Forbes Labs., Inc.—207.
Forker, E. W.—212.
Forty-Two Prods. Ltd.—351.
Foster-Forbes Glass Co.—493.
Foster, Pauline—68.
Foundation Prod. Inc.—644.
Frascotti, A.—495.
Frazier & Son—795.
Freer, FTC Commissioner—746.
Friedman, Jack N.—68.
Frisbie, Richard—795.
Fritzsche Brothers Inc.—345, 349.
Frolich, Dr. Per K.—207.
Frostbite, By M. A. Lesser—41.

Gage, John H.—207.
Gair Co. Inc., Robert—344, 653, 791, 804.
Gallowhur Chem. Corp.—343.
Galowin, Ralph—72.
Garlic Oil—685.
Garwood Co.—212.
Gaylord Shelton Co.—491.
Geary, Paul A.—645.
Gelatin Prods. Corp.—349.
Gelatin Solution For Shaock—529.
Gen. Scientific Equip. Co.—801.
George, Reginald—208.
Georgiades, George E.—212.
German Drugs—161; Companies—163.
Gift Sets—475.
Givaudan, Andre—789.
Givaudan-Delawanna Inc.—796.
Givaudan-Delawanna Ltd.—343.
Gladding, A. M.—643.
Glass Container—304.
Glaze, John M.—491.
Glycerine Production Might Fall—29.
Glycerite of Hydrogen Peroxide—857.
Goby, Francois—644.
Goldschmiedt, Dr. Henry—208.
Gordon & Co., David—349.
Gossner, Joseph J.—796.
Goulden, H.—491.
Grant, Jr., H. B.—343.
Gray, Dorothy—772.
Gray, Dr. Jacques P.—788.
Gray, Herbert—76.
Greene, Joseph F.—351.
Grelet, Jean E.—67.
Grote, I. W., Physiological and Chemical Aspects in the Flavoring of Medicinal Preparations—755.
Grove Labs.—303.
Groves, E. Stillman—347.
Guenther, Dr. Ernest—637, 789.
Guerlain—163, 473.

Hahn, John G.—643.
Hair Pomade—107, 854; Rinses—243; Markets—323; Liquid Dressing—376, 604, 854; Prep.—549, 595; Straightener—712; Selling—768; Lacquer—857; Blueing—855.
Halfpenny, Arthur G.—496.
Halgar Inc.—205.
Hall, Fred E.—639.
Hammer, John L., Jr.—788.
Hand Creams and Lotions, by H. Hilfer—172, 383, 549.
Handman, Maurice—73.
Hansen, Dr. Harold L.—643.
Harrington, Willis F.—204.
Harris, Dr. Carl A.—71, 351.
Harrop, Leslie D.—305.
Hart, John W.—203.
Haskell, G. L.—793.
Hasslauer, Victor, Ambergris in Perf. Exts.—458; 490.
Haviland, Ann—619, 772.
Hawley, Gen. Paul R.—637.
Hay Fever—241.
Health Insurance—746.
Heat Loss—79.
Hegarty, Dr. C. Paul—793.
Heguy, Peter L.—644.
Hemlock, Edward J.—796.
Henderson, Ralph—76, 647.
Hendrey, Dr. W. B.—205.
Hendy, Thomas G. G.—71.
Henissart, Albert V.—788.
Henna Rinse—565.
Henning, F. L.—496.
Henry, O.—305.
Henshall, Stuart T.—640.
Herchelroth, J. Hilary—209.
Hermanny, Charles A.—647.
Hewitt, C. M.—345.
Hayden Chem. Corp.—212, 489, 792, 795.
Heyden Twiss—68.
Hickok & Son Co.—345.
Hiebert, Dr. J. Mark—208.
Hildreth, Eugene—495.
Hilfer H., Make-Up Bases—44; Hand Creams—172; Hair Dressings—604.
Hill, Jr., James—208.
Hills, George S.—647.
Hjelm, Ernie—493.
Hobbs, Harlan—343.
Hoff, Irwin W.—76.
Hoffmann-La Roche Inc.—212.
Hofman, Philip B.—208.
Hogan & Co. Inc., Walter J.—637.
Hogan, Walter J.—637.
Holden, Walter—207.
Honey as Dispersing Agent—100.
Hooker Electrochemical Co.—491.
Hooker, Horace W., Jr.—68.
Hormocreme Inc.—72.
Hormone Patents—28, 815.
Horn Raymond E.—787.
Horsey, R. C., G-4 For Bovine Ringworm—462.
Houbigant—204, 325.
Hudnut Museum—328; Sales Co.—620.
Hughes Brushes Inc.—347.
Hula-Lei—772.
Huttleston, Roy J.—493.
Hygrade Labs. Inc.—207.

Import Procedure—301.
India, Trade-Marks in—369.
International Congress For Chemistry—303.
Inventories, Business and Sales—324.
Iodine Research Award—304; and Failing Lactation—381.
Ireland, Harry M.—344.
Irish Co. Ltd., Arthur—351.
Irma Patent—815.
Irone, Establish Structure of Nat.—828.
Isopropyl—549.

Jacobson, Joe—72.
James, Warner—76.
Jasmin—184.
Jeffrey Mfg. Co.—803.
Jensen,Howard P.—496.
Joering, E. A.—69.
Johnson & Johnson—80, 184.
Johnstone, Henry W.—495.

Kakra—Sringe Oil—828.
Kaness, H. L.—491.
Kapp, W. R.—343.
Karas, Dr. Stephen A.—796.
Karaya—243.
Karrass, George—796.
Katz, Dr. Alexander—305, 351, 792.
Keen, John R.—344.
Kenny, N. J.—348.
Kerrigan, James J.—787.
Khellin—380.
Kilby, Wm. A.—343.
Kimble, Co., Evan E.—787.
King, G. Lloyd—76.
Kinsman, J. Warren—204.
Kipfer, Max M.—787.
Klarmann, Emil G.—491.
Klein, Samuel—212, 791.
Knaack, Herman—795.
Knox Glass Assn. Inc.—491.
Koenigsberger, Sidney—645.
Kreider, Dr. Henry—639.
Kupke, Ray—787.
Kusik, Alan—792.

La Cross—49, 188.
Lady Esther—617.
Lakritz, William—68.
Lemartine, S. A.—619.
Lancome—619.
Lane, Edward D.—76.
Lanham Act, Conflicting Marks Under The—92; Alters Definition—229.
Lanning, Eugene—787.
Lanolin—243; Lotion—525; Saponification—675.
Lanvin—188.
Larrick, George P.—456, 497.
Latvin, Albert R., Seasonal Variation as a Factor in Toxicity—764.
Lauer, Math T.—211.
Leddon, Robert J.—308.
Lee Metal Prod. Co. Inc.—357.
Lehman, H. J.—489.
Leigh Perfumes—476.
LeLong, Lucien—473.
Lemke & Co., B. L.—795.
Lemon Injury to Teeth—104.
Lemongrass Oil, Trinidad—245.
Lengsfelder, Walter—495.
Lentheric Inc.—345, 473, 497.
Lentz, R. E.—492.
Leonard, Dr. Veador—499.
Leonard Drug Co.—788.
Lesser, M. A., Frostbite—41; Anticoagulants—178; Salvaging Red Blood Cells—320; Peptic Ulcer—466; Fluorine and Teeth—611; Alginates in Drugs and Cosmetics—760.
Leube, Peter—184.
Lever Bros. Co.—203, 368.
Levinson, Morris—76, 341.
Lewis, Joseph T.—492.
Lewis, Ralph P.—203.
Lighting—215.
Lightning Cal. Co. Inc.—803.
Lillie, Walter T.—69.
Linalool Deter.—829.
Liniments—273.
Lipscomb, Charles—789.
Lipstick, Ball Point—105; Making—377; Non-Smearing—525.
Liquid Conditioning Corp.—805.
Little Inc., Arthur D.—805.
Livermore, Jesse—620.
Local Burn—241.
Lorenson, Arthur E.—344.
Lorraine Compounds Inc.—639.
Lotion, Multi-purpose—107.
Lowell Inc., Edward—644.
Lubarsky, Howard—499.
Lubricating Jelly and Vaginal Preps.—856.
Luckman, Charles—203.
Luhrs, William D.—68.
Lulek, Dr. R. N.—489.
Luster Oil For Cattle—713.
Luxury Tax—187.
Lydon Brothers Inc.—644.
Lyon-Raymond Corp.—508, 650.
Lyons Tooth Paste—450.

Mackner, Arnold F.—489.
Magnus, Mabee & Reynard—349.
Magnus, Elisabeth G.—749, 796.
Magnus, Joseph B.—749.
Magnus, Percy C.—749.
Major, Dr. Randolph T.—207.
Make-Up Bases, by H. Hilfer—44.
Malisoff, Dr. William Marias—796.
Mallinckrodt Chem. Works—341; Malmstrom & Co., N. I.—348, 492, 640.
Management Test—216.
Marihuana—96.
Marschner, Edward L.—67.
Marsen, Arthur E.—67.
Martin, Hoyt & Milne Co.—647.
Martin Inc., Katherine—208.
Marvanity Co.—476.
Mason, Arnold E.—72.
Mast, George W.—204.
Matchabelli—188.
Maurella Prod. Co. Inc.—73.
Max Factor—328.
Mayer, Paul M. E.—499.
McClintock, Earl I., Future of Amer. Drug and Chem. Exps.—36, 67.
McCurry, R. Blayne—641.
McDermott, Charles B.—791.
McEwen, Robert J.—491.
McInnes, James J.—452.
McKay-Davis Inc.—341.
McKesson & Robbins—789.
McMann, Frank G.—205.
McNitt, James D.—491.
Medical Advances in 1946—27.
Medicinal Preps., Physiological and Chem. Aspects in the Flavoring of, by I. W. Grote and Peggy Walker—755.
Medicine For Children Inc.—499.

Menotti, Dr. Amel R.—489.
Mens Toiletries—184.
Menthols, Synthetic—244, 303; Prod.—684.
Merck & Co.—341, 495, 596, 747, 788.
Merck, George W.—596, 637, 747.
Merging Industry Interests—753.
Merrell Co., Wm. S.—208, 489, 789, 795.
Metalsalts Corp.—491.
Metopan For Cancer—240.
Meyer, A. C.—491.
Meyer, Roy P.—211.
Michaels, Eldon W.—644.
Mildew Control—855.
Miles Labs.—348.
Milky Way Cosmetics—208.
Miller, Clarence E.—69.
Miller, Dr. Harry—496.
Miller, George—209.
Miller Wrapping & Sealing Mach. Co.—795.
Mills, Beacon W.—344.
Mitson, Carl—203.
Mixers Inc.—656.
Molasses Prices—746.
Mooney, Chas.—345.
Mooney, W. J.—606.
Monsanto Chem. Co.—347, 492, 639.
Montenier, Inc., Jules—328, 351.
Moore, Dr. Maurice L.—497.
Moroccan Harvest Fennel—684.
Morris, Ralph—72.
Morrison, William—72.
Moser, John P.—492.
Motion Sickness—529.
Mouthwash Tablets—236; 383.
Muhlens, Ferd.—476.
Multi-Vitamin Factors, Increasing—29.
Munch, James C., Seasonal Variation as a Factor in Toxicity—764.
Musco Pyridine From Musk—829.
Musmanni, Jorge E.—344.

N-Acylthiomethylamides—97.
Narcosynthesis, Value of—825.
Nat. Assn. of Whl's—640.
Nat. Magnesia Co. Inc.—492.
Nat. Science Foundation—163.
N. W. D. A.—606, 644.
Neary, Mary G.—208.
Neim, Paulin—640.
Neimeth, Edward—492.
Nerolidol and Farnesol—532.
Neuberg, Prof. Carl—637.
Neuman, John H.—351.
Neutral Compatible Vehicle—524.
New Jersey Mach. Corp.—799.
New York Quinine & Chem. Works—647, 792.
New Zealand, State Medicine in—593.
Niagara Blower Co.—359.
Nicil Inc., Jean—791.
Norris, Ewart—353.
Northam Warren—164, 496.
Norwich Pharm. Co.—492.

Ocimun Suave Oil—384.
Ocular Prophylaxis with Penicillin—823.
Odor Control—244; Physics of 532.
Old South—771.
Olsen, Norman—348.
Olsen, Ralph—207.
Ophthalmic Sol.—101.
Orange Oil, Indian—108; Essence, Sweet—533; Study—684.
Organic Chemical, Synthetic—525.
Orr, Jr., George W.—208.
Ortho Pharm. Corp.—208.
O'Shea, M. Vincent—341.
Overseas Trade—176.
Owens-Illinois Glass Co.—343, 495, 640, 789.

Package Mach. Co.—493.
Packaging Exp.—475.
Packaging Mach. Inst.—647.
Pack-Rite Machines—508.
Panama Trade-Mark Use—93.
Paraldehyde Emul.—326.
Parenteral Drug Enforcement, by George P. Larrick—456.
Parfait Powder Puff Co.—745.
Parke, Davis & Co.—449.
Parkinson, George Robert—325.
Parsons, James J.—492.
Patents and Anti-Trust Laws—372; Double Standards—96; Trends and Thoughts—815.
Pauley, Gerald F.—793.
Payne, Arch.—208.
Penick & Co., S. B.—212, 347, 453, 647.
Penick, S. B.—453.
Penicillin—27; in Tooth Decay—28; Seaweed—29; Vaginal Adsorption—105; Waste for Feed—164; Aerosol—527; Salt for Delayed Action—595; Dicoumarol—680; for Diphtheria—823.
Penthal and Curare Anesthesia—380.
Peppermint Oil—384.
Persodent Hair Tonic—29.
Peptic Ulcer, by M. A. Lesser—466.
Perfume and Vitamin A—673; Advertising—767.
Perfuming Industrial Prods.—109.
Perl-Oussani Mach. Mfg. Co.—84.
Permanent Wave Cream—107.
Perry, Eli—76.
Perry, Henry E.—792.
Personnel Amenities—653.
Petgrave, R. C.—347.
Pfister, Leonard—639.
Pfizer & Co., Chas.—211, 499.
Pharmaceutical Market, The Widening—750.
Pharmacist Shortage—596.
Pharmacopoeia, International—165.
Phebalium Beckleri, Ess. Oil of—533.
Phelps, Norman—187.
Phenolphthalein Laxative—527.
Phenyl Mercuries—524.
Philadelphia Brand Survey—187.
Philips, H. Kenneth—76.
Picolines—373.
Pinaud Inc., Ed.—211.
Pinaud Toiletries—211.
Pittsburgh Lectrodryer Corp.—656.
Plibrico Jointless Firebrick Co.—359.
Plutonium Poisoning—105.
PM's and the FTC—748.
Pneumonia Vaccine—450.
Polak & Schwarz—499.
Polyethelene in Surgery—823.
Pomona Mach. Works—801.
Potassium Thiocyanate—529.
Powell & Co., John—71.
Power, Dr. Wilson H.—347.
Premo Pharm. Labs. Inc.—648.
Prescriptions—304.
Preshave Lotions—383.
Princess Eve—620.
Proprietary Assn.—449, 749.
Propylthiouracil—104, 164.
Protective Cream—839.
Protein Hydrolysate for Peptic Ulcer—381.
Pulverizing Mach. Co.—655, 801.
Putt, Earl—796.

Quicksilver—451.
Quinine—303, 746.

Radar Therapy—527.
Raitt, W. P.—345.
Rasmussen, H. B.—344.
Rathbone, W. V.—348.
Raymond Labs. Inc.—793.
Red Blood Cells, Salvaging, by M. A. Lesser—320.
Reese, Frank—76.
Refrigeration Eng. Corp.—84.
Reichert, Dr. Philip—76.
Reid, Francis J.—792.
Rentner, Maurice—476.
Research Grants—27; And Taxations—452.
Retailing, Poor—183.
Retailliau, H.—791.
Retirement by Fixed Age—595.
Returned Goods—183.
Revlon Prod. Inc.—188, 325.
Rex Prod. Corp.—640.
Rexall Drug Co.—495, 641; Repackaging—758.
Rhein, E. J.—72.
Rheumatic Diseases—823.
Riboflavin Implantation—825.
Richardson, Lunsford—305.
Richmond, J. Frank—789.
Ricketts, M. M.—209.
Rickettsialpox—104.
Rider, Dr. Theodore H.—67.
Riff Co.—619.
Rising, Philip A.—796.
Robbins, Herbert D.—351.
Roberts, William H. Jr.—497.
Roberts, Florence—351.
Roder, Paul W.—343.
Rodgers, James L.—204.
Roger & Gallet—53.
Rolling Cream—679.
Ronsard Perfumers—67.
Rosenthal, Herbert D.—211.
Ross Co. Inc., A. H.—348.
Rothmar, K.—205.
Roubechez Import Co.—344.
Roure, Madam Louis—644.
Rubinstein, Helena—328, 341.
Rumbough Jr., Stanley M.—639.
Russell & Thompson Mfg. Co.—83.
Rutin For Capillary Fragility—240.
Ruzicka, Prof. L.—496.
Ryan, Leo E.—351.

Saccharin Tablets—713.
Sage, Peggy—476, 617.
St. Paul Survey—188.
Sales Affiliates Inc.—215.
Sales Potential, Future—503.
Salesman's Assn. of ACS—792.
Salesmen, Training Retail—49; Inspiring—651; Union, Norwich Quits—746.
Saudi-Arabia—369.
Sayres, Philip C.—489.
Schafer, E. F.—495.
Schering in Germany—747.
Scheufele, George—616.
Schiaparelli—617, 772.
Schimmel & Co., Inc.—493.
Schlienger, Herbert—791.
Schma, John—644.
Schmideler, Edward J.—211.
Schneller, Dr. George H.—640.
Schreiber, Frederick W.—641.
Schreiver, John H.—69.
Schwartz, A. J.—647.
Schwartz, Dr. S. M.—341.
Scientific Sections, Growth of—749.
Scott, Joseph B.—203.
Seaforth—620.
Searle Labs., G. D.—345.
Searles, Dr. Earl R.—304.
Sebastian, R. L.—795.
Seil, Dr. Harvey A.—640.
Selene Prod. Inc.—347.
Sellmer, Edward R.—497.
Serra, J. A.—345.
Sex Hormones and Advertising—595.
Shampoo—100, 164; Paste Soap—236; Advertising—596; 617, 679; Cream—839.
Sharp & Dohme Inc.—68, 211, 345, 489, 493, 647, 792, 793.
Sharp, Dr. George—639.
Sharp, John E.—648.
Shave Cream—854.
Shriver & Co., Inc., T.—805.
Silbey, George H.—68.
Sigma Prod. Corp.—475.
Simplex Wrapping Mach. Co.—795.
Simpson, Lorne—209.
Sinclair, Frazer V., How to Start a Cosmetic Business—30.
Singapore Trade-Mark Office—93.
Sittenfield, Marcus—204.
Slam, Leo—345.
Slater, Charles H.—496, 648.
Sloane, Arron B., Seasonal Variation as a Factor in Toxicity—764.
Smelling Salts—549.
Smith Dorsey Co.—496.
Smith, Kline & French Labs.—351, 493, 643, 645.
Smithe Mach. Co., F. L.—655.
Smoking Habit Cures—839.
Snell Inc., Foster D.—344.
Socialized Medicine—594.
Sodium, Radioactive—380.
Sodium Citrate—376.
Solell, Otto H.—489.
Solitair—188.
Sommers Drug Stores Co.—639.
Southern Toilet Goods Assn.—324.
Spic vs. Spry—368.
Spices in Medicine—532.
Spitzer, Murray M.—641.
Sportsman—328.
Squibb & Sons, E. R.—351, 450, 497, 793.
Stambovsky, L., Review of the Suntan Industry—608.
Standard Brands Inc.—209.
Staniforth, Dr. Robert A.—347.
Stanway, H. Geddes—71.
Stearns & Co., Frederic—27, 351.
Stearyl Alcohol, by Robert J. Leddon—308.
Steih & Co.—499.
Steih, William M.—499.
Stenhouse, James G.—645.
Sterling Drug Inc.—162, 163, 596.
Sterling-Winthrop Lab.—28.
Steroidal Hormones—232.
Stevens, Charles J.—343.
Stilbestrol—373.
Stiles, Andrew J.—205.
Stock, Fred. J.—489.
Stokes & Smith Co.—644.
Stokes, J. S.—499.
Stoffel, Marion C.—347.
Stork Club Perfume—327.
Straka, J. A.—493.
Strauch, Fred E.—345.
Streptomycin—27; Output—302, 450; in Otitis Media—527; Rise—595; in Gonorrhea—581; Contact Dermatitis From—825.
Strieby, Irene Macy—76.
Strong Cobb Corp.—209.
Studio Cosmetic Co.—71.
Sulphur, Non-Greasy—830.
Sunde, Dr. Conrade J.—348.
Suntan Industry, Review of the, by L. Stambovsky—608.
Surface Combustion Corp.—655.
Surgical Abuses—304.
Suter, Dr. C. M.—647, 787.
Suzanne—619.
Swindell Brothers Inc.—203, 643.
Swindell, Robert H.—203.
Swiss Pine Importing Co.—619.
Sylk, Harry S.—472, 597.
Synfleur Scientific Labs. Inc.—490.
Synthetic Organic Chem. Mfg. Assn.—71, 787.

Taft Hartley Bill—79.
Tank, Richard—644.
Tariff Changes—747, 748.
Tarrant, George E.—351.
Taste and Odor in Materials, Improving—96.
Taylor, Lucian—212.
Terpeneless & Sesquiterpeneless Oils—385.
Testimony in Trade-Mark Cases—368.
Theraputic Research Found.—162.
Thomas, Harold B.—497.
Thompson, DeWitt—351.
Thompson, Donald R.—645.
Thymol and Menthol—97.
Tie-in With Movies—615.
Tite-Cap Mach. Co.—83.
Tobey International Co.—804.
Tocopherole—677.
T. G. A.—489, 791.
Toiletine Co.—747.
Toni Co.—209.
Toohy, John J.—793.
Toole, Theodore T.—792.
Tooth Powder Sales Off—28.
Torres, Dr. Carlos A.—211.
Torrey Pine Turpentine—829.
Towle, Edward C.—389.
Toxicity Seasonal Variation as a Factor in, by James C. Munch, Arron B. Sloane, Albert R. Latvin—764.
Trade Conference, Fitch Asks—28.
Trade-Marks, British—517; Registration—812.
Traub, Eugene W.—208.
Trench Mouth, Sol.—820.
Tri-Clover Mach. Co.—83, 508.
Triple E. Club—492.
Truesdail Labs. Inc.—795.
Trump, Frederic J.—787.
Tuberculosis Prep.—520.

Tuerck, William—641; Turner & Co., Joseph—69.
Turrell, Herbert—648.

Ullyot, Dr. Glenn E.—493.
Underwood, John A.—67.
Undulant Fever—596.
Ungerer & Co. Inc.—344, 345, 641.
U. S. Bottlers Mach. Co.—508.
U. S. Hormone Corp.—345.
U. S. Industrial Chem. Inc.—793.
U. S. Stoneware Co.—656.
Universal Labs. Inc.—792.
Upjohn Co.—645.
Urea in Hair Fixatives—237; in Hand Cream—855.

Valentine, Kenneth F.—648.
Van Ameringen, A. L.—348.
Van Campen, Dr. Marcus G.—639.
Van Rooijen, A.—205.
Vanilla Beans—305.
Vanillin—815.
Varvat, Gabriel—791.
Vaughan, Thomas R.—647.
Venice, Anna—491.
Verley, & Co., Albert—68.
Veterinary Prescriptions—303.
Viola Ordorates—685.
Vitamin—597; A—680; in Water Emul.—680; Lactation—681; A. Antioxidant for—820; and Mineral Oil—825; Foundation—29; C and Trenchmouth—104, 105; A, New Standards—162; Dentifrices—288; and Throat Lozenges—288; D—240; in Butter—241; Plant in Africa—304; A Acid—372; B—449; and Bees—449, 452; D—527; C—529.
Vivaudou Inc., V.—497.
Volentine, R. F.—788.
Von Hofe, George—647.

Walker, Charles P.—211, 499.
Walker, Dr. James W. W.—204.
Walker, James S.—68.
Walker, Maj. Theodore P.—792.
Walker, Peggy, Physiological and Chem. Aspects in Flavoring of Medicinal Preps.—755.
Wallace, William—343.
WAA—302.
Ward, Dr. Robert—451.
Ward, Dr. Walter E.—639.
Waterless Hand Cleaners—679.
Watkins Co., R. L.—792.
Watrous, Dr. Robert M.—787.
Watson, Rupert C.—495.
Wave Set—107.
Wave Sol.—711.
Waxman, Ab—347.
Way, Gordon T.—244.
Weinstein, Julius—492.
Western Packaging Exp.—617.
Western Reserve Pharm.—29.
Weston Electric Plant—801.
Wetterhahn, Dr. Julius—491.
Wheatly, Dr. Wm.—349.
Wheeler, Hayward C.—212.
Whitaker, Harris—341.
White, George A.—69.
White, Kenneth C.—640.
White Metal Mfg. Co.—639.
Whitehall Pharm. Co.—499.
Whitman, Rose—793.
Wiedman, Harry A.—211, 344.
Wildroot Co.—771.
Wilkenson M. DeWoody—789.
Wimmer, Dr. Kurt P.—491.
Wimpenny, William B.—639.
Winans, Clifford—491.
Winthrop Chem. Co.—163.
Winthrop-Stearns Inc.—451, 791.
Woman's Home Companion Survey—619.
Woodburn, William D.—208.
Woody, George—493.
World Ecomony and the Industry—598.
Wright, Dr. L. D.—793.
Wright, W. A.—351.

Xpray Corp.—620.

Yale & Towne Mfg. Co.—508.
Yardley—53.

Zambas, Peter P.—212.
Zinsser, John S.—34, 68.
Zirkel, George H.—341.
Zofaly Parfum—620.